DEPARTMENT OF THE AIR FORCE
AIR FORCE CIVIL ENGINEER CENTER
JOINT BASE SAN ANTONIO LACKLAND TEXAS

ENTERED

MAR 0 3 2015

Laura Peters
Restoration Program Manager
506 N. Air Commando Way
Cannon AFB NM 88103

Ms. Naomi Davidson
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East Bldg 1
Santa Fe NM 87505-6063

NMED
Hazardous Waste Bureau

Dear Ms. Davidson,

Attached you will find the December 2014 *"Annual Groundwater Monitoring Report Melrose Air Force Range"* for your review. If you have any questions regarding this submittal, please contact me at (575) 784-0491.

Sincerely,

Laura Peters

LAURA PETERS, RPM, AFCEC/CZO

Attachment:
Annual Groundwater Monitoring Report, Melrose Air Force Range

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

1002 N. Eglin Parkway
Shalimar, FL 32579
Office: (850) 613-6800
Fax: (850) 613-6764

February 17, 2015

Ms. Laura Peters
ERP Manager
27 SOCES/CEIER
506 N. Air Commando Way
Cannon AFB, NM 88103-5003

RE**:** **2014 Annual Groundwater Monitoring**
Melrose Air Force Range, New Mexico
USACE Contract No.: W9122PP-13-R-00551

Dear Ms. Peters,

Enclosed for your review is the *2014 Annual Groundwater Monitoring Report, Melrose Air Force Range, Roosevelt and Curry Counties, New Mexico.*

We appreciate the opportunity to work with Cannon Air Force Base and USACE to provide service to Melrose Air Force Range. If you have any questions or need further information, please call me at (850) 613-6800.

Sincerely,
Trinity Analysis & Development Corp.

Jonathan Kramer
Geologist/Project Manager

Attachment

Distribution List

Recipient	Hard Copies	Electronic Copies
Ms. Laura Peters ERP Manager 27 SOCES/ CEIER 506 N. Air Commando Way Cannon AFB, NM 88103-5003	2	2
Mr. John McBee Project Manager Albuquerque District, Corps of Engineers 4101 Jefferson Plaza, NE Albuquerque, NM 87109-3435	0	1
Mr. Joe Gootee Air Force Special Operations Command HQ AFSOC/A7AV 415 Independence Road Hurlburt Field, FL 32544-5244	0	1
Trinity Analysis & Development Corp. 1002 N. Eglin Parkway Shalimar, Florida 32579	0	1

FINAL
DECEMBER 2014
ANNUAL GROUNDWATER MONITORING REPORT
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

DECEMBER 2014

U.S. Army Corps of Engineers
Albuquerque District

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

DECEMBER 2014
ANNUAL GROUNDWATER MONITORING REPORT
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

Prepared For:
Cannon Air Force Base
Air Force Special Operations Command (AFSOC)
27th SOCES/CEIE
Cannon Air Force Base, NM 88103-5003

Prepared By:
Trinity Analysis & Development Corp.
1002 N. Eglin Parkway
Shalimar, FL 32579
(850) 613-6800

Under Contract To:
United States Army Corps of Engineers (USACE)
Albuquerque District
4101 Jefferson Plaza, NE
Albuquerque, NM 87109

Contract Number:
W912PP-13-C-0033, Task Order 001

February 2015

This page intentionally left blank.

CERTIFICATION PAGE

DECEMBER 2014
ANNUAL GROUNDWATER
MONITORING REPORT
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

Prepared For:
Air Force Special Operations Command
And
27th Special Operations Wing

Prepared By:
Trinity Analysis & Development Corp.
1002 N. Eglin Parkway
Shalimar, FL 32579
(850) 613-6800

Under Contract To:
United States Army Corps of Engineers (USACE)
Albuquerque District

I hereby submit that this Annual Groundwater Monitoring Report, December 2014, for the Melrose Air Force Range was prepared by me.

02/17/2015

Jonathan Kramer
Geologist
Trinity Analysis & Development Corp.

Date

This page intentionally left blank.

TABLE OF CONTENTS

CERTIFICATION PAGE ..... **i**
LIST OF TABLES ..... **v**
LIST OF FIGURES ..... **vi**
LIST OF APPENDICES ..... **vi**
LIST OF ABBREVIATIONS AND ACRONYMS ..... **vii**
1.0 INTRODUCTION **1-1**
1.1 Site History 1-1
1.2 Monitoring Network 1-2
1.3 Site Description & Background 1-3
1.3.1 Location/Access 1-3
1.3.2 SWMU Descriptions & History 1-4
1.3.2.1 SWMU 114 – Expended Ordnance and Industrial Waste Burial Site 1-4
1.3.2.2 SWMU 115 – Explosives-Contaminated Burial Site (Arroyo Burial Site) 1-5
1.3.2.3 SWMU 117 – Domestic Waste Burial Site (Southeast of Main Building) 1-6
1.3.2.4 SWMU 130 – World War II Cantonment Disposal Site 1-7
1.3.2.5 SWMU 131 – Domestic Waste Burial Site (East of Fire Station) 1-7
1.3.2.6 SWMU 132 – Disposal / Burn Site (North Helicopter Pad) 1-8
1.3.2.7 SWMU 133 – NW Munitions Disposal Site (NW Corner of Impact Area) 1-8
2.0 HYDROGEOLOGIC SETTING **2-1**
2.1 Geology 2-1
2.2 Hydrogeology 2-2
2.2.1 Topography 2-3
2.2.2 Soils 2-4
2.2.3 Surface Water Drainage Systems 2-4
2.2.4 Climate 2-5
3.0 WELL INSTALLATION HISTORY **3-1**
3.1 Agricultural Wells 3-1
3.2 Groundwater Monitoring Wells 3-2
4.0 MONITORING PLAN **4-1**
4.1 Semiannual – SWMU Groundwater Quality Network Monitoring Requirements 4-1
4.2 Annual Groundwater Quality Network Monitoring Requirements 4-2

4.3 Data Summary 4-2
5.0 SCOPE OF SERVICES 5-1
5.1 SUMMARY OF FIELD ACTIVITIES 5-1
5.1.1 Monitoring Well Network - Groundwater Sampling 5-1
5.1.1.1 2014 Semiannual Spring – SWMU Groundwater Quality Network 5-4
5.1.1.2 2014 Annual Spring – Groundwater Quality Network 5-5
2014 Semiannual Fall - SWMU Groundwater Quality Network 5-5
5.1.2 Investigation Derived Waste 5-6
5.1.3 Groundwater Elevation Measurements 5-6
5.1.4 Monitoring Network Well Inspection/Maintenance 5-7
5.1.5 Dedicated Sampling Equipment Installation 5-7
6.0 REGULATORY CRITERIA 6-1
7.0 GROUNDWATER MONITORING RESULTS 7-1
7.1 Field Water Quality Measurements 7-1
7.2 Groundwater Elevation, Gradient, and Flow Velocity 7-1
7.3 Well Condition Inspection/Maintenance 7-2
8.0 GROUNDWATER CHEMICAL ANALYTICAL DATA 8-1
8.1 Groundwater Quality 8-2
8.1.1 Spring 2014 - Annual Groundwater Quality Network 8-2
8.1.2 Spring 2014 - Semiannual SWMU Groundwater Quality Network 8-3
8.1.2.1 SWMU 114 8-3
8.1.2.2 SWMU 130 8-4
8.1.2.3 SWMU 131 8-4
8.1.3 Fall 2014 - Semiannual SWMU Groundwater Quality Network 8-4
8.1.3.1 SWMU 114 8-5
8.1.3.2 SWMU 130 8-5
8.1.3.3 SWMU 131 8-6
8.1.3.4 MWQ-24 (Background Well) 8-6
9.0 SUMMARY 9-1
10.0 WORKS CITED 10-1

LIST OF TABLES

Table 1 Summary of Well Construction Details
Table 2 Summary of Groundwater Elevation and Depth to Groundwater Data
Table 3a Summary of Spring 2014 Field Measurements of Water Quality
Table 3b Summary of Fall 2014 Field Measurements of Water Quality

Summary of Historic Field Measurements of Water Quality
Table 4a Specific Conductance
Table 4b Dissolved Oxygen
Table 4c pH
Table 4d Temperature
Table 4e Turbidity

Summary of Groundwater Chemical Analytical Data
Table 5a Summary of Spring 2014 Groundwater Chemical Analytical Data
Table 5b Summary of Fall 2014 Groundwater Chemical Analytical Data

Summary of Historic Groundwater Chemical Analytical Data
Table 6a Aluminum
Table 6b Antimony
Table 6c Arsenic
Table 6d Barium
Table 6e Beryllium
Table 6f Calcium
Table 6g Cadmium
Table 6h Cobalt
Table 6i Chromium
Table 6j Hexavalent Chromium
Table 6k Copper
Table 6l Iron
Table 6m Lead
Table 6n Magnesium
Table 6o Manganese
Table 6p Mercury
Table 6q Molybdenum
Table 6r Potassium
Table 6s Selenium
Table 6t Silver
Table 6u Sodium
Table 6v Nickel
Table 6w Thallium
Table 6x Titanium
Table 6y Vanadium
Table 6z Zinc

Table 6aa Alkalinity
Table 6ab Chloride
Table 6ac Cyanide
Table 6ad Nitrate
Table 6ae Nitrite
Table 6af Perchlorate
Table 6ag Sulfate
Table 6ah Total Dissolved Solids
Table 6ai Volatile Organic Compounds

LIST OF FIGURES

Figure 1 Site Location Map
Figure 2 Aerial Overview Site
Figure 3 Semiannual SWMU Monitoring Well Network Locations
Figure 4 USGS Topographic Map of Site and Vicinity
Figure 5 Annual Groundwater Monitoring Well Network Locations
Figure 6 Groundwater flow direction – October 20, 2014 to October 23, 2014 in the Ogallala Formation (Southern High Plains Aquifer)
Figure 7 Groundwater flow direction – October 20, 2014 to October 23, 2014 in the upper Chinle Formation

LIST OF APPENDICES

Appendix A Field Data
- Groundwater Sampling Logs (April 23, 2014 to May 1, 2014)
- Chain of Custodies (April 23, 2014 to May 1, 2014)
- Groundwater Sampling Logs (October 21, 2014 to October 23, 2014)
- Chain of Custodies (October 21, 2014 to October 23, 2014)

Appendix B Dedicated Bladder Pump Diagram

Appendix C Chemical Analytical Reports (Laboratory Analytical Reports)
- Spring 2014 (April 23, 2014 to May 1, 2014)
- Spring 2014-Split (May 1, 2014)
- Fall 2014 (October 21, 2014 to October 23, 2014)
- Fall 2014-Split (October 23, 2014)

Appendix D Chemical Analytical Program (Data Validation Reports)
- Spring 2014 (April 23, 2014 to May 1, 2014)
- Fall 2014 (October 21, 2014 to October 23, 2014)

LIST OF ABBREVIATIONS AND ACRONYMS

°C	Celsius
°F	Fahrenheit
Accutest	Accutest Laboratories, Tampa, Florida
AFB	Air Force Base
AFR	Air Force Range
AFSOC	Air Force Special Operations Command
amsl	above mean sea level
AOC	Area of Concern
bls	below land surface
CCB	continuing calibration blank
CEC	cation exchange capacity
CEI	Installation Management Flight
COCs	Chain-of-custodies
DO	dissolved oxygen
DoD	Department of Defense
DPT	direct-push technology
DQOs	data quality objectives
ECO	Eco-logical Environmental Services, Inc.
eDATApro	Environmental Data Professional, LLC
ELAP	Environmental Laboratory Accreditation Program
EOD	explosive ordnance disposal
ERP	Environmental Restoration Program
ft/ft	feet per foot
ft/yr	feet per year
GCAL	Gulf Coast Analytical Laboratories, Inc.
gpm	gallon per minute
HSWA	Hazardous and Solid Waste Amendments
ICB	Initial calibration blank
IDW	Investigation-derived waste
LCS/LCSD	Laboratory Control Sample/Laboratory Control Sample Duplicate
MB	Method Blank
MDL	Method Detection Limit
mg/L	milligrams per liter
ML	sandy silt
mph	miles per hour
MS/MSD	Matrix Spike/Matrix Spike Duplicate
NELAC	National Environmental Laboratory Accreditation Conference
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department

NOA	Notice of Approval
NOD	Notice of Disapproval
OD	Outer Diameter
ORP	oxidation reduction potential
psi	pounds per square inch
PVC	polyvinyl chloride
QA/QC	Quality Assurance/Quality Control
QC	Quality Control
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
RL	Reporting Limit
RPD	Relative Percent Difference
RSL	Regional Screening Level
SC	clayey sand
SC-CL	clayey sand to sandy clay
SDG	sample delivery group
SM	silty sand
SOW	Special Operations Wing
SR	State Road
SSL	Soil screening level
SVOC	semivolatile organic compounds
SWMUs	Solid Waste Management Units
TDS	Total Dissolved Solids
Trinity	Trinity Analysis & Development Corp.
µg/L	micrograms per liter
US	United States
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
UXO	unexploded ordnance
VOC	volatile organic compounds
WQCC	Water Quality Control Commission

1.0 INTRODUCTION

This Annual Groundwater Monitoring Report for the Melrose Air Force Range (AFR) has been prepared by Trinity Analysis & Development Corp. (Trinity) on behalf of the Cannon Air Force Base (AFB) 27th Special Operations Wing (SOW) and Air Force Special Operations Command (AFSOC). Trinity performed this work under contract to the United States (US) Army Corps of Engineers (USACE), Albuquerque District, Contract W912PP-13-C-0033. The document was prepared for submission to the New Mexico Environment Department (NMED). As requested by NMED, this report is written and organized in general accordance with the NMED *Position Paper: General Reporting Requirements for Routine Groundwater Monitoring Activities at RCRA Sites* (NMED, 2003).

1.1 Site History

In 1986, the Department of Defense (DoD) established the Environmental Restoration Program (ERP) to provide guidance and funding for the investigation and remediation of hazardous waste sites caused by historical disposal activities at military installations that may have contaminated soil, groundwater, and/or surface water. The Installation Management Flight (CEI) staff at the Cannon AFB 27th SOW is administratively responsible for oversight of ERP sites at Melrose AFR.

Melrose AFR was issued a Resource Conservation and Recovery Act (RCRA) Permit (NM5572124456-1), effective December 30, 1994 in conjunction with a Hazardous and Solid Waste Amendments (HSWA) Permit effective December 15, 1994. Trinity understands that both permits were allowed to expire on December 30, 2004 and December 15, 2004, respectively.

In accordance with the RCRA permit issued to Melrose AFR, an investigation of potential impacts to soil and groundwater that may have resulted from seven Solid Waste Management Units (SWMUs) was conducted. In accordance with the RCRA Permit, a *Phase I RCRA Facility Investigation for Melrose Air Force Range, Cannon Air Force Base, Clovis, New Mexico* (Foster Wheeler, 1996) and a *RCRA Facility Investigation Report Addendum for Melrose Bombing Range, Cannon Air Force Base, New Mexico* (Foster Wheeler, 2003) were completed and the reports submitted to NMED. NMED reviewed the Phase I RCRA Facility Investigation (RFI)

and the RFI Addendum and provided a response dated February 1, 2006 which requested a work plan outlining additional field investigation activities for the SWMUs located at Melrose AFR.

On May 9, 2007 the Department of the Air Force requested a deferral of the RFI Work Plan requested by NMED for Melrose AFR. The deferral request was based on the fact that the entire facility is an "active bombing or test range." On June 19, 2007 NMED approved deferment of a revised RFI Work Plan. In a Notice of Disapproval (NOD) dated February 11, 2010 for the *Draft Work Plan for Annual Groundwater Monitoring, Melrose Air Force Range, New Mexico*, (Tidewater, Inc., 2009) NMED stated that NMED had previously approved deferment of the revised RFI Work Plan with the stipulation that the purpose and scope of the work plan would be modified to indicate that groundwater monitoring and reporting would continue and is "… an interim measure, until the SWMUs are fully investigated…..". Based on NMED comments (February 11, 2010) on the *Draft Work Plan for Annual Groundwater Monitoring, Melrose Air Force Range, New Mexico* (Tidewater, Inc., 2009), a *Final Work Plan for Annual Groundwater Monitoring, Melrose Air Force Range, New Mexico* (Tidewater, Inc., 2010) was produced.

1.2 Monitoring Network

Based on the Final Work Plan for Annual Groundwater Monitoring, Melrose Air Force Range, New Mexico (Tidewater, 2010), two separate monitoring well networks are designated and sampled: the Semiannual SWMU Groundwater Quality Network which currently consists of ten wells, and the Annual Groundwater Quality Network which currently consists of seven wells that are not associated with a SWMU.

The Semiannual SWMU Groundwater Quality Network includes:

- Four groundwater monitoring wells at SWMU 114;
- Four groundwater monitoring wells at SWMU 130;
- One groundwater monitoring well at SWMU 131;
- One background well.

The Annual Groundwater Quality Network includes seven monitoring wells. A detailed discussion of the site sampling plan for both the Semiannual and Annual Groundwater Quality Network is provided in **Section 4.0**.

Water quality sampling and reporting is being performed to monitor for the presence of potential contaminants, gauge the effectiveness of the site's monitoring network, provide the foundation for correction or improvement to the monitoring plan as necessary, and to document the site's influence on the area's groundwater quality, if any.

All field activities presented in this document were completed in general accordance with the data quality objectives (DQOs) presented in the approved work plan (Tidewater, Inc., 2010) and the *Ground Water Monitoring Project Work Plan* (Trinity Analysis & Development Corp., 2011).

1.3 Site Description & Background

1.3.1 Location/Access

The Melrose AFR is a bombing and air-to-ground gunnery range under management of Cannon AFB within AFSOC. The Melrose AFR is situated approximately eight miles southwest of the village of Melrose, and located predominately in Roosevelt County with a small parcel in Curry County, New Mexico (**Figures 1 and 2**). Access to the range is achieved by traveling south from Melrose on New Mexico State Road (SR) 267 for approximately 9.3 miles, then west on Sundale Valley Road for approximately seven miles to the security gate.

During World War II, the area was used by the US Army Air Corps (predecessor to the US Air Force) for training. It has been continuously used by the US Air Force since World War II. In 1952 the range was expanded when the Air Force leased 7,771 acres of grassland for use as a bombing and air-to-ground gunnery range by the Tactical Air Command. Since 1952, the range has been expanded several times including land purchases and leases and currently comprises 70,910 acres.

The Impact Area of the Range is located northeast of the physiographically prominent Mesa and consists of grasslands with a grid of access roads and bombing targets. The Impact Area is delineated by a historical boundary that previously delineated the extent of the entire Range (**Figure 2**). In 1990-91, the boundary of the Range was expanded through the acquisition of agricultural and range land parcels on all sides. These parcels (leased lands) were part of Range property but were leased back to the prior owners for continued use as agricultural and range land. Leaseholders used the unconfined aquifer for irrigation and livestock watering. On

December 1, 2013, the leases were terminated for the safety of the lessee, thus discontinuing agricultural use on Melrose AFR.

Live high-explosives-filled ordnance was used on the range prior to 1969. Since then, practice bombs and inert full-scale bombs have been used at the range. Practice bombs and inert bombs are known to contain only small explosive or pyrotechnic spotting charges. Additionally, live gun ammunition has been used continuously on the range for target practice.

Over the years, portions of the Melrose AFR have been used to dispose of a variety of military and industrial waste from Melrose AFR and Cannon AFB. Wastes have included: unexploded ordnance (UXO), exploded ordnance, scrap metal, paints, solvents, pesticides, herbicides, putrescible waste, etc. (Foster Wheeler, 1996; Foster Wheeler, 2003). Melrose AFR currently has seven SWMUs located within its boundary. Only three of the seven SWMUs currently have permanent monitoring wells in place (**Figure 2** and **3**). The SWMUs are described as follows:

SWMU 114 – Expended Ordnance and Industrial Waste Burial Site (Motor Pool Trenches)
SWMU 115 – Explosives-Contaminated Burial Site (Arroyo Burial Site)
SWMU 117 – Domestic Waste Burial Site (Southeast of Main Building)
SWMU 130 – World War II Cantonment Disposal Site (formerly Area of Concern (AOC) 1)
SWMU 131 – Domestic Waste Burial Site (East of Fire Station; formerly AOC 2)
SWMU 132 – Disposal/Burn Site (North Helicopter Pad; formerly AOC 3)
SWMU 133 – Northwest Munitions Disposal Site (Northwest Corner of Impact Area; formerly AOC 4)

1.3.2 SWMU Descriptions & History

1.3.2.1 SWMU 114 – Expended Ordnance and Industrial Waste Burial Site

SWMU 114 is located in the southeast quarter of the southwest quarter of Section 15 and the northeast quarter of the northwest quarter of Section 22, Township 1 North, Range 30 East, in Roosevelt County, New Mexico (**Figure 3**). The site and surrounding area are flat with sparse desert scrub vegetation consisting of prairie grass and cactus.

According to historical RFI reports, the military used a series of eight unlined burial trenches at SWMU 114 to dispose of a variety of military and industrial waste from Melrose AFR and Cannon AFB. Trenches were approximately 20 to 40 feet in width, 100 to 200 feet in length and up to 40 feet in depth (Foster Wheeler, 1996; Foster Wheeler, 2003).

Exact dates and types of waste disposed at SWMU 114 are unknown. It is known, however, that between 1952 and 1962 drummed liquids were poured into the trenches and burned. Full drums of liquid, including possible unusable fuels, paints, sludge, and solvents may have also been placed in the trenches. For an unknown period of time, the military also disposed of an estimated 12,000 to 15,000 pounds per month of scrap metal from practice bombs and munitions in the trenches at SWMU 114 (Foster Wheeler, 1996; Foster Wheeler, 2003). According to the *Phase I RCRA Facility Investigation for Melrose Air Force Range, Cannon Air Force Base, Clovis, New Mexico* (Foster Wheeler, 1996) and a *RCRA Facility Investigation Report Addendum for Melrose Bombing Range, Cannon Air Force Base, New Mexico* (Foster Wheeler, 2003) the trenches at SWMU 114 were cleared of ordnance and have been backfilled and closed. However, one trench remains open.

According to historical RFI reports, four monitoring wells were installed and sampled as part of the Phase I RFI. Groundwater at this location is present approximately 150 feet below land surface (bls). No organic compounds were detected above groundwater standards during the Phase I RFI. Elevated metals concentrations were attributed to high turbidity and natural conditions. Elevated anion concentrations were attributed to natural conditions. Migration of metals from the disposal site to groundwater was determined to be unlikely due to the high cation exchange capacity (CEC) of the surface and near surface soil and the alkaline nature of the formation. It was determined that groundwater at SWMU 114 has not been impacted by disposal activities at the site (Foster Wheeler, 1996; Foster Wheeler, 2003).

1.3.2.2 SWMU 115 – Explosives-Contaminated Burial Site (Arroyo Burial Site)

SWMU 115 is located in the northeast quarter of the northeast quarter of Section 33, Township 1 North, Range 30 East in Roosevelt County, New Mexico (**Figure 3**). The site lies within a small arroyo located in the south-central portion of Melrose AFR. According to historical RFI reports, SWMU 115 was used for the disposal and burial of UXO in 1989. UXO and other exploded ordnance were reportedly collected from the surrounding areas, pushed into the arroyo, and

covered with a thin layer of soil. Storm water flows intermittently down the arroyo during heavy rains.

The ground surface at the site is relatively free of debris. The disposal area was 600 feet long, 15 to 20 feet wide, and 15 to 20 feet deep. The contents of SWMU 115 are believed to consist entirely of UXO and other exploded ordnance, including 750-pound and 2,000-pound bombs covered with a thin layer of soil. Groundwater was reported present at approximately 25 to 30 feet bls. During the Phase I RFI, groundwater samples were collected using direct-push technology (DPT). No organics or explosives related compounds were detected in groundwater samples submitted for analysis. Elevated metals concentrations were attributed to elevated turbidity in the samples. It was determined that groundwater at SWMU 115 has not been impacted by disposal activities at the site (Foster Wheeler, 1996; Foster Wheeler, 2003).

1.3.2.3 SWMU 117 – Domestic Waste Burial Site (Southeast of Main Building)

SWMU 117 is located in the northeast quarter of the southwest quarter of Section 22, Township 1 North, Range 30 East, in Roosevelt County, New Mexico (**Figure 3**). This site is located southeast of the main control building at the Melrose AFR. The area is within a slight depression that receives storm water runoff from the surrounding area.

According to the historical RFI reports, this SWMU was formerly used to dispose of domestic waste from the control building, including such items as food waste and common household items. Other items possibly disposed in this area could include used oil and grease, solvents, batteries, pesticides, or herbicides (Foster Wheeler, 1996; Foster Wheeler, 2003). Disposal at the site appears to have begun circa 1973 as evident in aerial photographs. The area used for disposal at SWMU 117 was approximately 300 feet by 300 feet or approximately two acres. It is a closed site and currently covered by native grasses.

Groundwater was reportedly not encountered at a maximum depth of 182 feet during the Phase I RFI. The four borings were backfilled to the top of a potential confining layer (caliche) at approximately 41 feet bls with wells installed to intercept potential seasonal or perched groundwater. These four wells were historically dry and were abandoned at NMED's request (Trinity, 2013). Based on the lack of groundwater and the lack of significant contamination in soil samples it was concluded that contamination of groundwater at SWMU 117 was unlikely (Foster Wheeler, 1996; Foster Wheeler, 2003).

1.3.2.4 SWMU 130 – World War II Cantonment Disposal Site

SWMU 130 is located in the northeast quarter of Section 17, Township 1 North, Range 30 East, in Roosevelt County, New Mexico (**Figure 3**). SWMU 130 was formerly referred to as AOC 1. According to historical RFI reports, the military used SWMU 130 as a sanitary landfill during World War II for a cantonment area (temporary housing area for troops). No documentation exists for specific wastes disposed at the site; however, it is possible that the waste stream included all items from domestic wastes to motor pool waste, UXO, munitions, batteries, oil and fuels, etc. The exact location of the disposal site is unknown; however approximately 50 acres were investigated during the Phase I RFI. Groundwater was reportedly present approximately 140 to 145 feet bls at SWMU 130. Four monitoring wells were installed and sampled as part of the Phase I RFI. No organic compounds were detected and only one metal (thallium) was detected above applicable groundwater standards. The elevated thallium concentration was attributed to natural conditions (Foster Wheeler, 1996; Foster Wheeler, 2003).

1.3.2.5 SWMU 131 – Domestic Waste Burial Site (East of Fire Station)

SWMU 131 is located in the northwest quarter of the southwest quarter of Section 22, Township 1 North, Range 30 East, in Roosevelt County, New Mexico (**Figure 3**). SWMU 131 was formerly referred to as AOC 2. This site is east of the Melrose AFR Fire Station and consists of approximately 0.5 acres. According to historical RFI reports, SWMU 131 was used for disposal and/or burning of wastes; however, the type and volume of wastes is unknown (Foster Wheeler, 2003). The suspected waste stream possibly included spent fuels, motor oil, batteries, paints, pesticides, and metals in addition to domestic waste. Waste first appears to have been disposed of at SWMU 131 circa 1966.

Two monitoring wells, a shallow and deep were installed in the investigative borings to depths of 50 and 185 feet bls, respectively. The shallow well was installed above a confining layer (caliche) to intercept seasonal or perched groundwater. The shallow well was historically dry and was abandoned at NMED's request (Trinity, 2013). Groundwater was reportedly present in the deep well at approximately 105 feet bls.

The deep groundwater well was sampled as part of the RFI. No organic analytes were detected in the groundwater during the Phase I RFI. Selenium and thallium were reported at concentrations above applicable groundwater standards; however, due to a lack of selenium or thallium in overlying soil samples it was determined that groundwater had not been impacted by SWMU 131 (Foster Wheeler, 1996; Foster Wheeler, 2003).

1.3.2.6 SWMU 132 – Disposal / Burn Site (North Helicopter Pad)

SWMU 132 is located in the southwest quarter of Section 22, Township 1 North, Range 30 East, in Roosevelt County, New Mexico (**Figure 3**). SWMU 132 was formerly referred to as AOC 3. This site is less than 0.5 acres located north of the former helicopter pad at the Melrose AFR operations area. SWMU 132 was reportedly used for burning and/or disposal of unknown wastes types and quantities. Possible wastes included domestic waste, motor oil, metals, and residue from burning. Waste first appears to have been disposed of at SWMU 132 circa 1973.

During the Phase I RFI no groundwater was encountered during drilling to a total depth of 182 feet bls. The boring was backfilled to the top of a potential confining layer (caliche) at approximately 50 feet bls to intercept seasonal or perched groundwater. Due to land-use (helicopter pad) the well was installed flush mount. The well was dry during the Phase I RFI (1996) and during the RFI Addendum (2003) and therefore could not be sampled. Based on the lack of groundwater this well was abandoned at NMED's request. Due to the lack of groundwater it was determined to not have been impacted by the presence of SWMU 132 (Foster Wheeler, 1996; Foster Wheeler, 2003).

1.3.2.7 SWMU 133 – NW Munitions Disposal Site (NW Corner of Impact Area)

SWMU 133 is located in the northwestern corner of the impact area. SWMU 133 was formerly referred to as AOC 4. This site is located in the east-central part of Section 17 with some overlap into Section 16, Township 1 North, Range 30 East in Roosevelt County, New Mexico (**Figure 3**). The site is flat with native scrub vegetation and areas free of vegetation. According to historical RFI reports, SWMU 133 was used from 1952 to 1960 for disposal of exploded ordnance and UXO.

Groundwater was reportedly present at approximately 112 to 127 feet bls. During the Phase I RFI, groundwater samples were collected from three of four borings using DPT. Groundwater was not encountered in one of the borings. No organics were detected in groundwater. Concentrations of several metals exceeded applicable groundwater standards. A pattern of increased concentrations of five of the metals from west to east across the site might suggest impacts from SWMU 133 or from naturally occurring lateral changes in bedrock (Foster Wheeler, 1996; Foster Wheeler, 2003). Permanent monitoring wells were not installed due to the location of SWMU 133 in an overflight approach route along the northern portion of the active Impact Area. In a letter to Cannon AFB dated June 19, 2007 NMED stated, that "*…NMED will prepare a "corrective action-only" permit to be implemented once the range is closed, transferring, or transferred*." (NMED, 2007). When the Range is deactivated additional assessment will likely be required.

This page intentionally left blank.

2.0 HYDROGEOLOGIC SETTING

2.1 Geology

The stratigraphic units of interest at Melrose AFR are the Chinle, Ogallala, and Blackwater Draw Formations. In eastern New Mexico, the Ogallala and Blackwater Draw Formations form the Southern High Plains Aquifer, which is part of a larger aquifer system extending from eastern New Mexico and Colorado into Texas, Oklahoma, Kansas, Nebraska, and South Dakota (Langman, 2004). The Chinle Formation (Triassic age) is the base of the unconfined Southern High Plains Aquifer and is composed of red shales with interbedded sands (redbeds) deposited by low-energy streams in floodplains and deltas. The top of the Chinle Formation is marked by an erosional unconformity with up to several hundred feet of relief (Lee Wan and Associates, Inc., 1990). The Ogallala Formation (Tertiary age) is the uppermost formation for the central and southern parts of Melrose AFR and it lies unconformably over the upper unit of the Chinle Formation. The Blackwater Draw Formation (Quaternary age) overlies the Ogallala Formation in the northern part of Melrose AFR.

In the vicinity of Melrose AFR, the Ogallala dips gently to the southeast; no faults or buried structural lineaments are known to exist in the area. The thickness of the Ogallala Formation may vary significantly over short north-south distances. In the southwest most corner of Melrose AFR Langman (2004) depicts the Chinle as outcropping.

Typically, the erosional surface of the upper unit of the Chinle Formation forms an uneven contact with the Ogallala Formation and in many places is marked with gravel, cobble, or boulder deposits. The Tertiary aggradational stream deposits filled the valleys, uplands, and fluvial channels of the eroded Triassic deposits (Gustavson, 1996). Coarser materials were deposited in the channels and valleys with finer material between channels. The middle sections of the Ogallala are characterized by unconsolidated fluvial sands, silts, and clays in a fining-upwards sequence, with the upper portion consisting of eolian sands and silts deposited over the fluvial sediments and upland areas separating paleovalleys (Hart, 1985). The unconformity and variable deposition between the Chinle and Ogallala formations and within the Southern High Plains Aquifer have resulted in vertical and horizontal changes in the unit's porosity and permeability and produced a discontinuous aquifer within the Ogallala Formation (Hart, 1985).

Caliche is a major feature of the Ogallala Formation, occurring in nearly continuous to discontinuous layers throughout. The uppermost caliche, termed the "climax caliche," crops out around playas and the bounding escarpments of the Ogallala Formation, and is locally termed "caprock." It is typically three to five feet thick. At Melrose AFR, this caprock forms a resistant layer on top of the Mesa in the southwestern corner of the range. Caliches that occur lower in the Ogallala Formation are platy and harder. Caliche is likely to either be thin or absent below playas. A particularly thick layer of caliche occurs between approximately 45 and 55 feet bls at Melrose AFR.

2.2 Hydrogeology

Melrose AFR is located near the western margin of the Southern High Plains Aquifer of which the Ogallala Formation is the primary water bearing unit. The Southern High Plains Aquifer forms the primary aquifer for potable, livestock, and irrigation water in the vicinity of Melrose AFR and throughout the eastern New Mexico region. In addition, there are several localized shallow water-bearing zones across the region used for irrigation purposes. No deeper aquifers are known to be in use in the vicinity of Melrose AFR. However, groundwater of poorer quality does occur in the Chinle Formation, which underlies the Ogallala Formation. Within New Mexico, groundwater in the Southern High Plains Aquifer generally flows eastward (Hart, 1985), which is considered the overall direction of regional flow in the unconfined aquifer.

The Southern High Plains Aquifer was mapped by Hart as unsaturated or saturated only in isolated channels in the area occupied by the southern and western portions of Melrose AFR and as saturated in the northern portion (Hart, 1985).

Hydrogeologically, the Chinle Formation provides regional confinement to the Southern High Plains Aquifer at its base, generally forming an impermeable aquitard (Fallin, 1989). Recoverable water is locally present within more permeable seams, however, production potential is very low and the water is typically of lower quality than in the Southern High Plains Aquifer above.

Monitoring wells MWQ-18, MWQ-21, and MWQ-24 are the only wells indicated to target the Ogallala Formation (Southern High Plains Aquifer) (Trinity, 2014). MWQ-22 is indicated to straddle the Ogallala/Chinle contact. The majority of monitoring wells are indicated to target the Chinle Formation. Some wells (MWQ-2, -19, -20 and MA02MW001D) are set quite deep into the Chinle (50-120 feet). Water levels in these wells are measured at 15 to 55 feet above the Ogallala/Chinle contact and some measure of confinement is likely. Monitoring wells around SWMU's 114 and 130 target Chinle sediments at depths of approximately 25 to 45 feet below its contact with the Ogallala. Water levels in these wells are measured at altitudes below the contact and appear to represent 'first available water' at those locales (Trinity, 2014).

2.2.1 Topography

Melrose AFR is located in the Southern High Plains physiographic region and lies atop a large plateau known as the Llano Estacado (Hawley, 1976). The Llano Estacado is a nearly flat plain that slopes gently (typically 10 to 15 feet per mile) to the east and southeast from eastern New Mexico into western Texas. In eastern New Mexico, the Llano exceeds 4,000 feet above mean sea level (amsl), and elevations in the vicinity of Melrose AFR range from 4,200 to 4,650 feet amsl **Figure 4**. Streams in the region are ephemeral and the regional drainage pattern is poorly developed. The closest named drainages to Melrose AFR are Chapman Draw, approximately two miles west of Melrose AFR, and Cañada del Tule, about two miles southeast of the southeastern corner of Melrose AFR. Chapman Draw drains to the north, and Cañada del Tule drains to the east. The surface topography of Melrose AFR slopes to the northeast and overland flow and ephemeral drainage from the area of the sites is toward the northeast and not toward either named drainage.

The most prominent geomorphic features in the vicinity of Melrose AFR are two spurs of an escarpment known as the Mesa, which rise about 200 feet above the average elevation of the surrounding surface. The northern spur, referred to as the West Mesa, which runs near the western side of the active impact area, ends in a small butte near the center and overlooks much of the facility. Various observation and communication and control facilities associated with operations at Melrose AFR are located on the butte. The eastward-trending southern spur, which bounds the southern side of the active impact area, is referred to as the South Mesa.

Melrose AFR topography (excluding the Mesa) is open and mostly flat, gently sloping to the northeast. The Mesa dominates the southwest part of Melrose AFR. It is a topographic high and is part of the Western Caprock Escarpment that defines the western boundary of the Southern High Plains aquifer. The Mesa has a plateau area of about 7,775 acres ranging in altitude from 4,600 to 4,700 feet amsl and forms the surface basin boundary between the Pecos River Basin to the west and the Portales Valley to the east. The Impact Area gently slopes from southwest to northeast, away from the Mesa.

2.2.2 Soils

According to the soil survey of Curry and Roosevelt County (USDA, 2010), soil types in the Melrose AFR area include loams, fine sandy loams, and loamy fine sands of the Amarillo-Clovis association and calcareous soils of the Potter-Mansker association. These soils would be classified as fine sandy silt (ML), silty fine sand (SM), clayey sand (SC), and clayey sand to silty, fine sandy clay (SC-CL) under the Unified Soil Classification System, and as aridisols (calciorthids) under the US Department of Agriculture-Soil Conservation Service Comprehensive Soil Classification System.

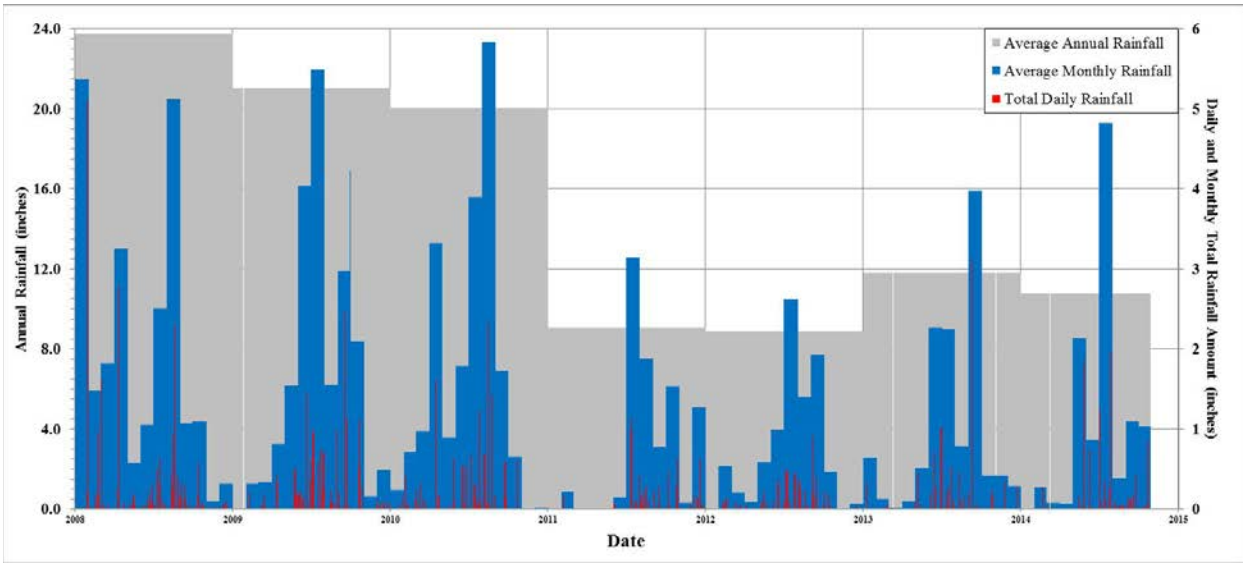
2.2.3 Surface Water Drainage Systems

Relict sand dunes and minor playas are located to the north of Melrose AFR, along the southern side of the US Highway 84, and larger playas with surface areas greater than 1/3 square mile are present one to two miles north of Melrose AFR. During periods of rainfall, the playas collect surface runoff to form ephemeral playa lakes.

An arroyo drainage rises in the southwest corner of Melrose AFR, at the intersection of the West and South mesas, and extends about four miles to the northeast across the active impact area before its surface expression fades out. Other than the arroyo, no streams or integrated drainage pattern exists on or near Melrose AFR. An impoundment formed by an earthen dam about a mile upstream of the drainage's terminus intermittently stores surface water during periods when precipitation is sufficient to generate flow. During most of the year both the arroyo and impoundment are dry. No other surface water bodies are located within Melrose AFR except minor ephemeral channels including the Chapman Draw and the Cañada del Tule, which originate at the Mesa.

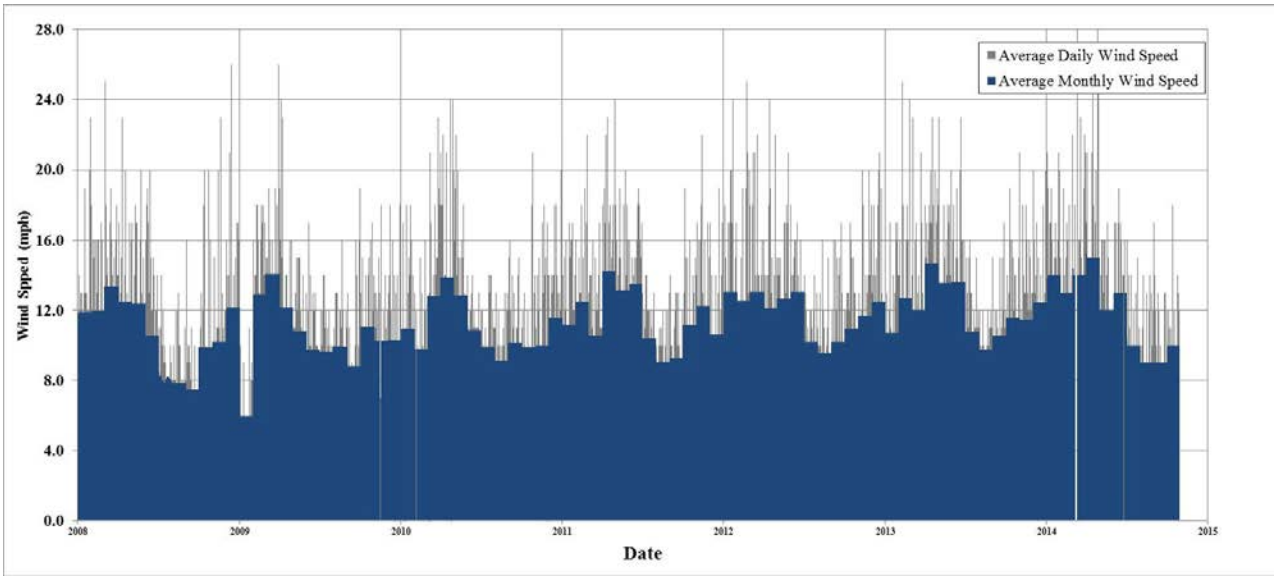
2.2.4 Climate

The climate of east-central New Mexico is tropical semiarid. Based on data collected from 1908 to 2014 for the village of Melrose, the average annual minimum and maximum temperatures are 42.4 and 73.0 degrees Fahrenheit (°F); the maximum temperatures and precipitation occur during the summer months. The Melrose area is characterized by highly variable precipitation patterns; the average monthly precipitation ranges from 0.39 inches in January to 2.81 inches in August. The average annual precipitation is 15.95 inches, and most of the precipitation is lost to evaporation. Annual pan evaporation (1925-2005) at a weather station in Clovis, New Mexico, is 86.68 inches; evaporation is greatest between May and August (Western Regional Climate Center). In the chart below, recent local rainfall (daily and monthly) is plotted for Melrose AFR. As is evident from the chart, the site vicinity receives the majority of annual rainfall during the summer months. The total annual rainfall for 2013 and 2014 was 11.98 and 15.22 inches (excluding December data), respectively. Rainfall in 2013 is below the annual average and 2014 very close to the annual average. The area is characterized by highly variable precipitation patterns, the apparent greater than normal rainfall in 2010 (19.90 inches) and the lower than normal in 2012 and 2013 may not be altogether atypical.



Prevailing winds are from the west with an average speed of 11 miles per hour (mph). Windblown dust is generated frequently in this region of the country because the winds are often gusty and the climate is semiarid. The Texas Panhandle/eastern New Mexico area is considered to have the highest dust particulate counts in the continental United States; occasionally, this

windblown dust is of sufficient quantity to restrict visibility. Most of the seasonal dust storms occur in March and April, when the average daily wind speed commonly exceeds 20 to 25 mph and the average monthly wind speed approaches 15 mph (Weather Undergound, 2014).



3.0 WELL INSTALLATION HISTORY

As previously discussed, the current monitoring well network consists of a Semiannual SWMU Groundwater Quality Network (10 wells), an Annual Groundwater Quality Network (seven wells), and 12 additional wells utilized solely for the collection of water levels. The following discussion provides a limited historical discussion of well installation at Melrose AFR, particularly as it relates to the monitoring network. Well construction details are summarized in **Table 1**, Summary of Well Construction Details, and **Table 2**, Summary of Groundwater Levels. Trinity has attempted to discuss network well installations in chronological order as they were installed at Melrose AFR.

3.1 Agricultural Wells

The Homestead Act of 1862 consisted of individual land grants of 160 acres each. Roosevelt County was primarily homesteaded from circa 1900 to 1915, although settlement continued beyond 1915 and portions of Melrose AFR were farmed and grazed until the leases were terminated in December 2013. During the peak of settlement activities (1905 to 1915) the area currently encompassing Melrose AFR contained four towns or villages which included Fertile Valley, Granite Valley, Benson, and Mesa, with a post office being located in Granite Valley (Burroughs, 1975). Remnants of early settlement of the area are located on Melrose AFR and include but are not limited to abandoned homesteads and numerous wells of which limited firsthand information or records are available. Twelve of these wells are currently included in the monitoring network as described below.

Well ID	Network Designation	Historical Use
MWQ-8	Water-level only	Windmill-driven well
MWQ-12	Water-level only	Windmill-driven well
MWQ-13	Water-level only	Windmill-driven well
MWL-4	Water-level only	Windmill-driven well
MWL-5	Water-level only	Windmill-driven well
MWL-6	Water-level only	Windmill-driven well
MWL-7	Water-level only	Windmill-driven well
MWL-8	Water-level only	Windmill-driven well
MWL-9	Water-level only	Windmill-driven well
MWL-10	Water-level only	Windmill-driven well

MWL-11	Water-level only	Windmill-driven well
MWL-12	Water-level only	Windmill-driven well

Due to the age of these wells very limited construction details are available. In several instances total depth has been measured but construction details, lithologic data, and screened intervals are unknown (**Table 1**). It is also unknown, without additional field investigations, if the wells are screened across the Ogallala Formation (Southern High Plains Aquifer) or the Chinle Formation.

3.2 Groundwater Monitoring Wells

The remaining 17 wells that are part of the monitoring network consist of wells known to have been constructed for the purposes of environmental groundwater monitoring (**Table 1**). These are all indicated to have been installed since 1995. Investigative activities have been ongoing since 1994 when a Phase I RFI was conducted in accordance with the requirements of the RCRA permit for Melrose AFR. Investigations were conducted for SWMUs 114, 115, and 117 as well as four potential AOCs identified during a site visit in September 1994. The results of the RFI are discussed in the *Phase I RCRA Facility Investigation for Melrose Air Force Range, Cannon Air Force Base, Clovis, New Mexico* (Foster Wheeler, 1996) and a *RCRA Facility Investigation Report Addendum for Melrose Bombing Range, Cannon Air Force Base, New Mexico* (Foster Wheeler, 2003). The permit covered open burning/open detonation at the UXO Open Burn Treatment Pit (SWMU 118); however, SWMU 118 was not a subject of the investigation. Permanent monitoring wells were installed during the RFI as follows;

- SWMU 114 (M114MW001, M114MW002, M114MW003, and M114MW004)
- SWMU 117 (M117MW001, M117MW002, M117MW003, and M117MW004)
- SWMU 130 (MAO1MW001, MAO1MW002, MAO1MW003, and MAO1MW004)
- SWMU 131 (MAO2MW001S and MAO2MW001D)
- SWMU 132 (MAO3MW001)

The four wells at SWMU 117, the shallow well at SWMU 131, and the well at SWMU 132 have historically been dry since installation and were abandoned by Trinity on October 5, 2011 as approved by NMED and the New Mexico Office of the State Engineer. Based on the findings detailed in *Geophysical and Downhole Camera Investigation Report, Melrose Air Force Range, Roosevelt and Curry Counties, New Mexico* (Trinity Analysis & Development Corp, 2014), it appears that the four monitoring wells at SWMU 114, the four monitoring wells at SWMU 130,

and the monitoring well at SWMU 131 are all screened in upper portions of the Chinle Formation and not the Ogallala (Southern High Plains Aquifer) as previously suspected. While the wells appear to be monitoring water quality from the Chinle Formation they appear to be monitoring the "*first available groundwater*. "

Since the 1995 RFI, seven additional wells have been installed at Melrose AFR. Annual Groundwater Quality Network well MW-14 was installed in the previously permitted explosive ordnance disposal (EOD) pit. No boring logs, well completion reports, or well details have been discovered and the exact installation date is unknown. The United States Geologic Survey (USGS) installed Annual Groundwater Quality Network wells MWQ-1 and MWQ-2 in June 2002 as discussed in *Ground-water hydrology and water quality of the Southern High Plains aquifer, Melrose Air Force Range, Cannon Air Force Base, Curry and Roosevelt Counties, New Mexico, 2002-03: U.S. Geological Survey Scientific Investigations Report 2004-5158* (Langman, 2004). Monitoring well MWQ-1 is currently dry; however, MWQ-2 is routinely sampled. MWQ-2 was reportedly installed in the Chinle Formation at a depth of 240 feet bls to monitor a thin (two feet thick) confined aquifer section located approximately 100 feet beneath the base of the Ogallala Aquifer. Construction details and screen placement provided in the boring log records were confirmed in the *Geophysical and Downhole Camera Investigation Report, Melrose Air Force Range, Roosevelt and Curry Counties, New Mexico* (Trinity Analysis & Development Corp., 2014).

According to Melrose AFR personnel, wells MWQ-18 through MWQ-22 were installed by the USGS subsequent to the 2004 USGS report. Based on available water quality data, MWQ-18 and MWQ-19 were installed prior to July 2004; MWQ-20, MWQ-21, and MWQ-22 were installed prior to July 2005. Based on the findings detailed in *Geophysical and Downhole Camera Investigation Report, Melrose Air Force Range, Roosevelt and Curry Counties, New Mexico* (Trinity Analysis & Development Corp, 2014), it appears that MWQ-18 and MWQ-21 are installed in the Ogallala Formation, MWQ-22 is partially straddling the contact between the Ogallala and Chinle Formations and MWQ-19 and MWQ-20 installed in the Chinle.

Monitoring well MWQ-24 was installed by Trinity the week of August 12, 2013. MWQ-24 was installed up-gradient of the impact area to serve as a background well. Well construction details for MWQ-24 are located in **Table 1** and in the *Background Well MWQ-24 Installation Report,*

Melrose Air Force Range, Roosevelt and Curry Counties, New Mexico (Trinity Analysis & Development Corp., 2013b). MWQ-24 is installed in the Ogallala Formation.

4.0 MONITORING PLAN

4.1 Semiannual – SWMU Groundwater Quality Network Monitoring Requirements

Based on the previously approved Work Plan (Tidewater, Inc., 2010) and the *Ground Water Monitoring Project Work Plan* (Trinity Analysis & Development Corp., 2011) the current groundwater monitoring plan provides for semiannual testing at ten wells associated with the Semiannual SWMU Groundwater Quality Network. The accompanying tables summarize current testing requirements.

Semiannual - SWMU Groundwater Quality Network

Analyte	Field Parameters [1]	VOCs [2]	Explosives [3]	Metals [4] (Total & Diss.)	Chromium (VI)	Cyanide	Mercury	Nitrite, Nitrate	Chloride, Sulfate	Perchlorate [5]	Alkalinity	TDS
Method	**NA**	**8260B**	**8330**	**6020A**	**218.6**	**9012A**	**7470A**	**300.0**	**300.0**	**6860/ 6850**	**2320B**	**2540C**
M114MW001	x	x	x	x	x	x	x	x	x	x	x	x
M114MW002	x	x	x	x	x	x	x	x	x	x	x	x
M114MW003	x	x	x	x	x	x	x	x	x	x	x	x
M114MW004	x	x	x	x	x	x	x	x	x	x	x	x
MAO1MW001	x	x	x	x	x	x	x	x	x	x	x	x
MAO1MW002	x	x	x	x	x	x	x	x	x	x	x	x
MAO1MW003	x	x	x	x	x	x	x	x	x	x	x	x
MAO1MW004	x	x	x	x	x	x	x	x	x	x	x	x
MAO2MW001D	x	x	x	x	x	x	x	x	x	x	x	x
MWQ-24	x	x	x	x	x	x	x	x	x	x	x	x

[1] Field Parameters: Conductivity, Dissolved Oxygen, pH, Temperature, Turbidity
[2] VOCs: Target Compound List
[3] Explosives: 1,3,5-Trinitrobenzene, 1,3-Dinitrobenzene, 2,4,6-Trinitrotoluene, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-Amino-4,6-dinitrotoluene, 2-Nitrotoluene, 3-Nitrotoluene, 4-Amino-2,6-dinitrotoluene, 4-Nitrotoluene, HMX, Nitrobenzene, RDX, Tetryl
[4] Metals: Target Analyte List
[5] For perchlorate 6860 is the method approved by NMED and is utilized for routine analysis. However, the split samples are analyzed utilizing 6850 as no other laboratory could be located that utilizes 6860.

4.2 Annual Groundwater Quality Network Monitoring Requirements

Based on the previously approved Work Plan (Tidewater, Inc., 2010) and the *Ground Water Monitoring Project Work Plan* (Trinity Analysis & Development Corp., 2011) the current groundwater monitoring plan provides for annual testing at seven wells associated with the Annual Groundwater Quality Network. The accompanying tables summarize testing requirements.

Annual - Groundwater Quality Network

Analyte	Field Parameters [1]	Metals [2] (Total & Diss.)	Chromium (VI)	Cyanide	Nitrite, Nitrate	Chloride, Sulfate	Perchlorate[3]	Alkalinity	TDS
Method	**NA**	**6020A**	**218.6**	**9012A**	**300.0**	**300.0**	**6860**	**2320B**	**2540C**
MWQ-2	x	x	x	x	x	x	x	x	x
MWQ-14	x	x	x	x	x	x	x	x	x
MWQ-18	x	x	x	x	x	x	x	x	x
MWQ-19	x	x	x	x	x	x	x	x	x
MWQ-20	x	x	x	x	x	x	x	x	x
MWQ-21	x	x	x	x	x	x	x	x	x
MWQ-22	x	x	x	x	x	x	x	x	x

[1] Field Parameters: Conductivity, Dissolved Oxygen, pH, Temperature, Turbidity, ORP
[2] Metals: Target Analyte List
[3] For perchlorate 6860 is the method approved by NMED and is utilized for routine analysis. However, the split samples are analyzed utilizing 6850 as no other laboratory could be located that utilizes 6860.

4.3 Data Summary

Although this report includes readily available historical water quality data collected since January 2004, the focus of this report is on data collected in the most recent one-year reporting period (2014). The table below summarizes the known water quality testing events conducted at Melrose AFR and presented in this report.

Summary of Water Quality Test Events

Sampling Event			USGS January 2004[1]	USGS July 2004[2]	USGS July 2005[1]	USGS June 2007[2]	Initial Baseline Ground Water Monitoring[3, 4]	2010 Spring Semiannual & Annual Sampling Event[4,5]	2010 Fall Semiannual Sampling Event[5]	2011 Spring Semiannual & Annual Sampling Event[4,5]	2011 Fall Semiannual Sampling Event[5]	2012 Fall Semiannual Sampling Event[5]	2013 Spring Annual Sampling Event[6]	2013 Fall Semiannual Sampling Event[6]	2014 Sping Annual Sampling Event	2014 Fall Semiannual Sampling Event
Sample Dates		Start	1/12/2004	7/19/2004	7/18/2005	7/18/2007	1/20/2009	1/26/2010	10/25/2010	5/3/2011	9/27/2011	11/2/2012	5/29/2013	12/13/2013	4/23/2014	10/21/2014
		End	1/15/2004	7/21/2004	7/20/2005	7/22/2007	2/3/2009	3/4/2010	10/29/2010	5/18/2011	10/3/2011	11/8/2012	6/6/2013	12/16/2013	5/1/2014	10/23/2014
Semiannual - SWMU Well Network	SWMU 114	M114MW001	---	---	---	---	x	x	x	x	x	x	x	x	x	x
		M114MW002	---	---	---	---	x	x	x	x	x	x	x	x	x	x
		M114MW003	x	x	x	x	x	x	x	x	x	x	x	x	x	x
		M114MW004	---	---	---	---	x	x	x	x	x	x	x	x	x	x
	SWMU 130	MAO1MW001	---	---	---	---	x	x	x	x	x	x	x	x	x	x
		MAO1MW002	---	---	---	---	x	x	x	x	x	x	x	x	x	x
		MAO1MW003	x	x	---	---	x	x	x	x	x	x	x	x	x	x
		MAO1MW004	---	---	---	---	x	x	x	x	x	x	x	x	x	x
	SWMU 131	MAO2MW001D	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	MWQ-24[6]		---	---	---	---	---	---	---	---	---	---	---	x	x	x
Annual Well Network	MWQ-2		x	x	x	x	x	x	---	x	---	---	x	---	x	---
	MWQ-14		x	x	x	x	x	x	---	x	---	---	x	---	x	---
	MWQ-18		---	---	x	x	x	x	---	x	---	---	x	---	x	---
	MWQ-19		---	---	---	---	x	x	---	x	---	---	x	---	x	---
	MWQ-20		---	---	x	x	x	x	---	x	---	---	x	---	x	---
	MWQ-21		---	---	x	x	x	x	---	x	---	---	x	---	x	---
	MWQ-22		---	---	x	x	x	x	---	x	---	---	x	---	x	---

x = sampled; --- = not sampled

[1] Filtered ground-water samples were analyzed for explosives, metals, nitrate plus nitrite, ammonia as nitrogen, phosphorus, anions (bromide, chloride, fluoride, and sulfate), sulfide, organic carbon, alkalinity, dissolved solids, and perchlorate.

[2] Filtered ground-water samples were analyzed for volatile organic compounds, semi-volatile organic compounds, organochlorine pesticides, organophosphorus pesticides, metals, anions (bromide, chloride, fluoride, and sulfate), alkalinity, dissolved solids, organic carbon, phosphorus, sulfide, ammonia, nitrate plus nitrite, and perchlorate.

[3] 2009 Semiannual samples were collected and analyzed for VOCs, SVOCs, organochlorine pesticides, metals, hexavalent chromium, perchlorate, bromide, chloride, fluoride, sulfate, explosives, TOC, phosphate, and ammonia.

[4] 2010-2011 Annual samples were collected and analyzed for metals, TDS, hexavalent chromium, alkalinity, TOC, phosphate, ammonia, and nitrate/nitrite.

[5] 2010-2012 Semiannual samples were collected and analyzed for VOCs, explosives, metals, chloride, sulfate, nitrate, nitrite, total dissolved solids, alkalinity, cyanide, perchlorate, and hexavalent chromium.

[6] MWQ-24 was installed during the week of August 12, 2013. The well was initially sampled on August 20, 2013.

This page intentionally left blank.

5.0 SCOPE OF SERVICES

5.1 SUMMARY OF FIELD ACTIVITIES

The Annual Groundwater Monitoring Report focuses on data collected during the most recent one-year reporting period (2014). The 2014 Spring sampling event, which included sampling associated with the Semiannual SWMU Groundwater Quality Network and the Annual Groundwater Quality Network, was conducted between April 23, 2014 and May 1, 2014. The 2014 Fall sampling event, which included sampling associated with the Semiannual SWMU Groundwater Quality Network was conducted between October 21, 2014 and October 23, 2014.

The most recent field activities were completed in general accordance with field protocols included in the approved work plan (Tidewater, Inc., 2010) and the *Ground Water Monitoring Project Work Plan* (Trinity Analysis & Development Corp., 2011). Activities during recent field sampling events included:

- Inspection of the monitoring well network (Semiannual SWMU Groundwater Quality Network and the Annual Groundwater Quality Network),
- Collection of groundwater levels from the entire monitoring network,
- Installation of dedicated polyvinyl chloride (PVC) Well Wizard® bladder pumps and double-bonded polyethylene tubing in the Annual Groundwater Quality Network monitoring wells,
- Collection of groundwater samples from the Annual Groundwater Quality Network and the Semiannual SWMU Groundwater Quality Network.

Activities associated with each task are discussed in more detail below. Semiannual sample locations are depicted on **Figure 3**, Annual sample locations are depicted on **Figure 5**, and well construction details are summarized in **Table 1**.

5.1.1 Monitoring Well Network - Groundwater Sampling

Prior to sample collection during the 2014 Spring Semiannual and Annual sampling events, the wells were purged using low-flow sampling techniques using dedicated PVC Well Wizard® bladder pumps. Field parameters were monitored with an YSI 556-MPS multi-parameter water quality meter with attached flow through cell. The YSI multi-parameter water quality meter

monitored dissolved oxygen (DO), temperature, pH, specific conductance, and oxidation reduction potential (ORP). Turbidity was monitored with a Lamotte 2020we Turbidity Meter. Groundwater levels were measured prior to and during pumping to monitor drawdown. Water levels were measured with an In-Situ Water Level Meter (500 foot). The water quality meter was calibrated once per day before use. The turbidity meter was calibrated at the beginning of sampling activities, with the calibration verified each day of use, per the manufacturers' instruction. Field Data is provided in **Appendix A.**

Gulf Coast Analytical Laboratories, Inc. (GCAL), Baton Rouge, LA was used for sample analysis during this investigation. GCAL is accredited in accordance with the National Environmental Laboratory Accreditation Conference (NELAC) (Certificate Number 01955), and the DoD Environmental Laboratory Accreditation Program (ELAP) (Certificate Number 1482). The laboratory provided coolers, sample containers (including preservatives where applicable), custody seals, and chain-of-custody (COC) documents. Analytical data validation was conducted by third party Environmental Data Professional, LLC (eDATApro), Lake Charles, LA.

In accordance with the approved work plan (Tidewater, Inc., 2010) and the *Ground Water Monitoring Project Work Plan* (Trinity Analysis & Development Corp., 2011) a quality control-split sample was collected and submitted to an alternate laboratory. The purpose of the split sample was to use the alternate laboratory to verify the accuracy of the primary laboratory. Accutest Laboratories (Accutest), Tampa, FL was used for analysis of the split sample. Accutest is accredited in accordance with the NELAC (Certificate Number E83510), and the DoD ELAP (Certificate Number L2229). The laboratory provided coolers, sample containers (including preservatives where applicable), custody seals, and COC documents.

In accordance with the approved work plan (Tidewater, Inc., 2010) and the *Ground Water Monitoring Project Work Plan* (Trinity Analysis & Development Corp., 2011), Field Duplicate samples were collected at a 10-percent rate (i.e., one per every 10 samples collected) for all parameters. Laboratory quality control (QC) samples, including matrix spike/matrix spike duplicates (MS/MSDs), were collected at a 5-percent rate (i.e., one per every 20 samples collected) for all parameters. Trip Blanks were analyzed for VOCs and were included in each cooler shipped to the laboratory from the field. Split Samples were collected at a 5-percent rate

(i.e., one per every 20 samples collected).

Analysis of samples within the prescribed holding time is critical to ensuring that samples may be considered valid and representative of the sample matrix. Sample holding time is defined as the interval between sample collection and sample preparation/analysis. Allowable holding times for analyses employed in this investigation are included in the table below.

Appropriate Sample Containers, Preservatives, and Holding Times

Anlytical Parameters	Method	Container	Preservation	Maximum Holding Time
Alkalinity	2320B	500-mL plastic or glass	Cool 4°C	14 days
Chloride	300.0	500-mL plastic or glass	Cool 4°C	28 days
Chromium (VI)	218.6	250-mL plastic or glass	Cool 4°C, buffer solution 9.3<pH<9.7	14 days
Cyanide	9012A	500-mL plastic or glass	Cool, ≤4 °C9, NaOH to pH>12, reducing agent	14 days
Explosives	8330	Two 1-liter wide mouth amber glass bottle, with Teflon lined cap	Cool 4°C	7 days until extraction, 40 days after extraction
Mercury	7470A	500-mL plastic or glass	Cool 4°C, HNO3 to pH<2	28 days
Metals (Total & Diss.)	6020A	500-mL plastic or glass	Cool 4°C, HNO3 to pH<2	6 months
Metals (Total & Diss.)	6010C	500-mL plastic or glass	Cool 4°C, HNO3 to pH<2	6 months
Nitrite, Nitrate	300.0	500-mL plastic or glass	Cool 4°C	48 hours
Perchlorate	6860	125-mL plastic or glass	Cool 4°C	28 days
Perchlorate	6850	125-mL plastic or glass	Cool 4°C	28 days
Sulfate	300.0	500-mL plastic or glass	Cool 4°C	28 days
TDS	2540C	500-mL plastic or glass	Cool 4°C	7 days
VOCs	8260B	Three 40-mL glass vials	Cool 4°C, HCL to pH<2	14 days

Samples intended for chemical analyses were packed on wet ice in sealed coolers for transport to the laboratory. Placing the samples on wet ice ensures a temperature of 4º ±2°Celsius (°C) upon receipt by the contract laboratory. Samples were shipped by overnight commercial courier to the designated laboratory. Proper shipping and handling protocol included: filling of containers with an appropriate amount of sample medium, ensuring that container lids were tight, ensuring that labels were completed, wrapping containers in bubble wrap for protection, double bagging, and inclusion of appropriate quality assurance/quality control (QA/QC) blanks. COCs accompanied samples in a waterproof plastic bag taped to the inside of the cooler lid. Copies of the COCs are provided in **Appendix A**.

Decontamination procedures were in general accordance with the *Ground Water Monitoring Project Work Plan* (Trinity Analysis & Development Corp., 2011). Sufficient quantity of clean equipment was transported to the field to last the entire day. Disposable equipment was used when possible to eliminate the possibility of cross contamination. Additionally, new sample containers for laboratory analyses were provided by the laboratory for each sample collected.

5.1.1.1 2014 Semiannual Spring – SWMU Groundwater Quality Network

Groundwater samples were collected from the following wells at the dates and times specified:

Sampling Schedule

SWMU 114	M114MW001	4/24/2014 1430
	M114MW002	4/24/2014 1308
	M114MW003	4/24/2014 1200
	M114MW004	4/25/2014 0925
SWMU 130	MAO1MW001	4/23/2014 1416
	MAO1MW002	4/23/2014 1006
	MAO1MW003	4/23/2014 1308
	MAO1MW004	4/24/2014 1010
SWMU 131	MAO2MW001D	4/25/2014 1252
Background	MWQ-24	4/25/2014 1100

The monitoring wells were purged and sampled using low-flow sampling techniques using dedicated PVC Well Wizard® bladder pumps. Sample locations are depicted on **Figure 3** and **Figure 5** and well construction summary details are provided in **Table 1.** After purging was completed as demonstrated by stabilized water quality parameters samples were collected and analyzed for VOCs, explosives, total and dissolved metals, chloride, sulfate, nitrate, nitrite, TDS alkalinity, cyanide, perchlorate, and hexavalent chromium. A summary of analytical and field data from the most recent sampling event is provided in **Table 2** through **Table 6ai.**

Groundwater samples were placed in appropriately-labeled sample containers, packaged in coolers with wet ice to attain a temperature of 4 °C, and shipped to GCAL in Baton Rouge, Louisiana via Federal Express.

QC samples collected in the field included:

- Field Duplicates: MA02MW001D-a
- MS/MSD: MAO1MW002-ms, MAO1MW002-sd
- Split Sample: M114MW002
- Trip Blanks: TB-1, TB-2, TB-3, TB-4, TB-5, TB-6, TB-7

5.1.1.2 2014 Annual Spring – Groundwater Quality Network

Groundwater samples were collected from the following wells at the dates and times specified:

Sampling Schedule

MWQ-2	4/30/2014 1046
MWQ-14	5/1/2014 0751
MWQ-18	4/29/2014 0931
MWQ-19	4/29/2014 0841
MWQ-20	5/1/2014 1016
MWQ-21	4/29/2014 1241
MWQ-22	4/30/2014 0841

The monitoring wells were purged and sampled using low-flow sampling techniques using dedicated PVC Well Wizard® bladder pumps. After purging was completed as demonstrated by stabilized water quality parameters, samples were collected and analyzed for total and dissolved metals, chloride, sulfate, nitrate, nitrite, TDS, alkalinity, cyanide, perchlorate, and hexavalent chromium. A summary of analytical and field data from the most recent sampling event is provided in **Table 2 through Table 6ai.**

Groundwater samples were placed in appropriately-labeled sample containers, packaged in coolers with wet ice to attain a temperature of 4 °C, and shipped to GCAL in Baton Rouge, Louisiana via Federal Express.

QC samples collected in the field included:

- Field Duplicates: MWQ-22-a
- MS/MSD: MWQ-2-ms, MWQ-2-sd

2014 Semiannual Fall - SWMU Groundwater Quality Network

Groundwater samples were collected from the following wells at the dates and times specified:

Sampling Schedule

SWMU 114	M114MW001	10/22/2014 1235
	M114MW002	10/22/2014 0935
	M114MW003	10/22/2014 1110
	M114MW004	10/22/2014 1025
SWMU 130	MAO1MW001	10/21/2014 1220
	MAO1MW002	10/21/2014 1040
	MAO1MW003	10/21/2014 1226
	MAO1MW004	10/21/2014 1100
SWMU 131	MAO2MW001D	10/23/2014 1143
Background	MWQ-24	10/23/2014 0932

The monitoring wells were purged and sampled using low-flow sampling techniques using newly installed, dedicated Well Wizard® PVC bladder pumps. Sample locations are depicted on **Figures 3** and **Figure 5** and well construction summary details are provided in **Table 1**. After purging was completed as demonstrated by stabilized water quality parameters, samples were collected and analyzed for VOCs, explosives, total and dissolved metals, chloride, sulfate, nitrate, nitrite, TDS, alkalinity, cyanide, perchlorate, and hexavalent chromium. A summary of analytical and field data from the most recent sampling event is provided in **Table 2** through **Table 6ai**.

Groundwater samples were placed in appropriately-labeled sample containers, packaged in coolers with wet ice to attain a temperature of 4 °C, and shipped to GCAL in Baton Rouge, Louisiana via Federal Express.

QC samples collected in the field included:

- Field Duplicates: MA01MW004
- MS/MSD: MWQ-24-ms, MWQ-24-sd
- Split Sample: MAO2MW001D
- Trip Blanks: MA01MW002-c, MA01MW004-c, MA01MW003-c, M114MW002-c, M114MW004-c, TB-1 (TB-1 was submitted to Accutest as part of the Split Sample)

5.1.2 Investigation Derived Waste

Investigative-derived waste (IDW) from the Spring and Fall 2014 sampling events were temporarily containerized in 5-gallon buckets with lids secured in the bed of the pickup truck. At the completion of daily field activities, the IDW was discharged into a 250-gallon carboy located at a designated area for IDW storage. The IDW will be disposed of in accordance with the approved work plan (Tidewater, Inc., 2010) and the *Ground Water Monitoring Field Sampling Plan* (Trinity Analysis & Development Corp.,2014).

5.1.3 Groundwater Elevation Measurements

Water levels were measured from the surveyed elevation reference points on the tops of the PVC casings or, in the case of metal or concrete well casings, from the highest point of the casing

using an In-Situ® Water Level Meter (500 foot). Measurements were taken to the nearest hundredth of a foot, and were documented in the log book. The probes were decontaminated before use, between wells, and at the conclusion of measurement activities. Recent and historical groundwater level measurement information is presented in **Table 2**.

Water levels from the Spring and Fall 2014 sampling events were collected prior to the start of groundwater sample collection at all accessible monitoring wells prior to well purging and sampling.

5.1.4 Monitoring Network Well Inspection/Maintenance

Well inspections sought to verify presence of: identification tag, total well depth, well type completion, presence, and condition of bollards, protective casings, well pads, type of cap, etc.

5.1.5 Dedicated Sampling Equipment Installation

Prior to the Spring 2014 annual groundwater sampling event, dedicated bladder pumps were installed in all seven of the wells that make up the annual groundwater monitoring network. All onsite monitoring wells now have dedicated pumps. The Well Wizard® low-flow groundwater sampling pumps (Model No. P1101M) are constructed of PVC. A construction diagram is included in **Appendix B.** Attached to each bladder pump is dedicated double bonded 3/8-inch outer diameter (OD) and ¼-inch OD polyethylene tubing. Details on pump placement within each well are summarized in **Table 1.**

This page intentionally left blank.

6.0 REGULATORY CRITERIA

The *2014 NMED Risk Assessment Guidance for Site Investigations and Remediation* (NMED, 2014) document was used to determine whether potential site-related contaminants exceed groundwater screening guidelines. The groundwater screening guidelines are included on all appropriate tables. Exceedances of groundwater screening guidelines are highlighted in red.

This page intentionally left blank.

7.0 GROUNDWATER MONITORING RESULTS

7.1 Field Water Quality Measurements

This report is written and organized in general accordance with the NMED *Position Paper: General Reporting Requirements for Routine Groundwater Monitoring Activities at RCRA Sites,* (NMED, 2003). As such, limited to no discussion is provided below as tables "*summarizing … field water quality measurements can be substituted for this section.*" Applicable data is included in **Table 3**.

7.2 Groundwater Elevation, Gradient, and Flow Velocity

A comprehensive round of water levels was collected from the Semiannual SWMU Groundwater Monitoring Network and Annual Groundwater Monitoring Network by Trinity in April and again in December. Recent and historic groundwater elevations and trends are summarized in **Table 2**.

Based on the findings of the *Geophysical and Downhole Camera Investigation Report, Melrose Air Force Range, Roosevelt and Curry Counties, New Mexico* (Trinity Analysis & Development Corp., 2014) monitoring wells MWQ-18, MWQ-21, and MWQ-24 are the only wells indicated to target the Ogallala Formation (Southern High Plains Aquifer). MWQ-22 is indicated to straddle the Ogallala/Chinle contact, and thus has not been included in groundwater flow determination maps. The majority of monitoring wells are indicated to target the Chinle Formation. Some wells (MWQ-2, -19, -20 and MA02MW001D) are set quite deep into the Chinle (50-120 feet). Water levels in these wells are measured at 15 to 55 feet above the Ogallala/Chinle contact and some measure of confinement is likely, and thus have not been included in groundwater flow determination maps.

Monitoring wells around SWMU's 114 and 130 and MWQ-14 appear to target Chinle sediments at depths of approximately 25 to 45 feet below its contact with the Ogallala. Water levels in these wells are measured at altitudes below the contact and may represent 'first available water' at those locales.

Two groundwater flow maps are presented as part of this report:

1. **Figure 6** - Groundwater flow direction based on data collected by Trinity between October 20 and October 23, 2014 for the Ogallala Formation (Southern High Plains Aquifer).
2. **Figure 7** - Groundwater flow direction based on data collected by Trinity between October 20 and 23, 2014 for the upper portion of the Chinle Formation.

Water-level contours for the Southern High Plains Aquifer indicate flow to be to the northeast; however, only three wells are screened in the Ogallala Formation. Several old windmill-driven wells have been utilized for the collection of groundwater elevations and in the past have been utilized for the determination of groundwater flow direction; however, it is not known if these wells are screened in the Chinle or Ogallala Formation, and thus have not been included in groundwater flow determination maps.

7.3 Well Condition Inspection/Maintenance

In general, the condition of the Semiannual SWMU Groundwater Quality Network and Annual Groundwater Quality Network is adequate for groundwater quality sampling activities.

8.0 GROUNDWATER CHEMICAL ANALYTICAL DATA

Although this report utilizes available historical data (groundwater elevations, hydraulic conductivities, water quality data, etc.) gathered since 1994, the focus of this report is on data collected in the most recent one-year reporting period (2014). Much of the information presented in this report is in the form of tables, charts, and diagrams. Limited discussion accompanies each section since most illustrations do not require detailed explanation. A summary of analytical and field data from the most recent sampling event are provided in **Table 2** through **6ai** and includes parameter summary tables and trend plots. Chemical analytical reports (laboratory analytical data) are included in **Appendix C**. In accordance with the *Ground Water Monitoring Project Work Plan* (Trinity Analysis & Development Corp., 2011) split samples were collected for submittal to an alternative laboratory. The analytical data for the split samples are also included in **Appendix C**.

The presence of metals in groundwater samples collected from monitoring wells can be natural, anthropogenic in origin, or both. Metals are common, naturally occurring, ubiquitous elements in sediments such as the Ogallala Formation, and in some instances may naturally exceed applicable standards. Elevated metals in groundwater samples may be an artifact of the well installation process in that formation damage incurred during drilling may not be sufficiently repaired and/or the well may not be completely developed, which result in elevated turbidity during groundwater sampling. Additionally, and sometimes unavoidably, the targeting of less desirable strata, i.e., placing the screen intake opposite clayey sediment, can also result in the introduction of colloidal clay into samples, which may also produce high metals results. Sampling protocol can have significant effect on measured concentrations.

It is Trinity's experience that for groundwater collected from wells installed in clastic aquifers such as this one, comparison of total and dissolved metals results is essential. Large discrepancies between total and dissolved metals results for groundwater collected in this type of environment suggests 'artificial' influence from the well. When similar concentrations for total and dissolved metals are reported during a single sampling event the total result is likely an accurate reflection of the metal concentration in groundwater moving through the aquifer, and would suggest that the reported concentrations are ambient in origin, waste related, or both. To date, insufficient data has been collected to accurately determine a relationship between turbidity

and elevated metals concentrations in total and dissolved groundwater samples.

Previous sampling events conducted at Melrose AFR have included dissolved (filtered) metals results. In the majority of sampling conducted prior to January 2010 only dissolved metals results have been reported. NMED has previously accepted the use of dissolved metals data at Melrose AFR to support the argument that increased turbidity may result in increased metals concentrations. Documents where data has previously been submitted and accepted include but are not limited to:

- *Phase I RCRA Facility Investigation for Melrose Air Force Range* (Foster Wheeler, 1996);
- *RCRA Facility Investigation Report Addendum for Melrose Bombing Range* (Foster Wheeler, 2003);
- *Final Report, Initial Baseline Groundwater Monitoring, Melrose Air Force Range, New Mexico* (URS, 2009).

Based on data validation of the 2014 sampling event, the data were determined to be valid and achieved data completeness. Chemical Analytical Program data (Quality Assurance Summary Report and data validation reports) are provided in **Appendix D**. All analytical data for the 2014 sampling event were evaluated by eDATApro. Level III Data Validation was performed according to guidance from *USEPA: Contract Laboratory Program, National Functional Guidelines for Organic Data Review* (USEPA, 1999), *USEPA: Contract Laboratory Program, National Functional Guidelines for Inorganic Data Review* (USEPA, 2004). All data was determined to be valid and achieved data completeness.

8.1 Groundwater Quality

8.1.1 Spring 2014 - Annual Groundwater Quality Network

This section summarizes the Spring 2014 annual groundwater sampling event conducted at Melrose AFR. Available historic data is summarized in **Table 4a – 4e** and **Table 6a – 6ai** and includes parameter summary tables and trend plots. Recent field data are provided in **Table 3a**, and recent laboratory analytical data are provided in **Table 5a**. Discussions provided below are based on data collected during the current reporting period. As requested by NMED, this report is written and organized in general accordance with the NMED *Position Paper, General*

Reporting Requirements for Routine Groundwater Monitoring Activities at RCRA Sites, February 14, 2003. As such, limited to no discussion is provided below as tables "*summarizing the groundwater and QA/QC chemical analytical data, applicable cleanup levels and modifications to the groundwater sampling program can be substituted for this section.*"

Of the analyses performed, cyanide, hexavalent chromium, and arsenic were the only parameters detected above applicable groundwater screening guidelines. A summary of water quality results are provided in **Table 5a**. Laboratory analytical data can be found in **Appendix C**.

Arsenic and hexavalent chromium are detected sporadically in the Annual Groundwater Quality Network. Cyanide was detected at estimated concentrations that exceeded the screening criteria and will continue to be monitored.

8.1.2 Spring 2014 - Semiannual SWMU Groundwater Quality Network

This section summarizes the Spring 2014 semiannual groundwater sampling event conducted at SWMUs 114, SWMU 130 and SWMU 131 at Melrose AFR. Available historic data is summarized in **Table 4a – 4e** and **Table 6a – 6ai** and includes parameter summary tables and trend plots. Recent field data are provided in **Table 3a**, and recent laboratory analytical data are provided in **Table 5a**. Discussions provided below are based on data collected during the current reporting period. As requested by NMED, this report is written and organized in general accordance with the NMED *Position Paper: General Reporting Requirements for Routine Groundwater Monitoring Activities at RCRA Sites* (NMED, 2003). As such, limited to no discussion is provided below as tables "*summarizing the groundwater and QA/QC chemical analytical data, applicable cleanup levels and modifications to the groundwater sampling program can be substituted for this section.*"

8.1.2.1 SWMU 114

Of the analyses performed, VOCs, explosives, and cyanide were reported as undetected. With the exception of hexavalent chromium, metals and perchlorate were detected but at concentrations below applicable screening guidelines. Hexavalent chromium was detected in all four monitoring wells at concentrations ranging from 0.643 to 0.905 µg/L, exceeding the screening criteria of 0.25 µg/L. No other parameters were detected above applicable screening guidelines during the 2014 reporting period. Hexavalent chromium was also detected at similar

concentrations in the background monitoring well, MWQ-24. A summary of groundwater screening guidelines and water quality results are provided in **Table 5a**. Laboratory analytical data can be found in **Appendix C**.

8.1.2.2 SWMU 130

Of the analyses performed, VOCs, explosives, and perchlorate, were either undetected, or were detected at concentrations below applicable screening guidelines. Cyanide was either undetected or detected at concentrations below applicable screening guidelines in all SWMU 130 wells with the exception of MAO1MW003. Cyanide was detected at an estimated concentration of 0.0033 mg/L at this well, exceeding the screening criteria of 0.00146 mg/L. Hexavalent chromium was detected in all four monitoring wells at concentrations ranging from 0.327 to 1.70 µg/L, exceeding the screening criteria of 0.25 µg/L. Arsenic was detected in MAO1MW004 at a concentration of 1.21 µg/L, exceeding the screening criteria of 0.51 µg/L. All other metals were either undetected or detected at levels below applicable screening guidelines. Hexavalent chromium and arsenic were also detected at similar concentrations in the background monitoring well, MWQ-24. A summary of groundwater screening guidelines and water quality results are provided in **Table 5a**. Laboratory analytical data can be found in **Appendix C**.

8.1.2.3 SWMU 131

Of the analysis performed, explosives, metals, hexavalent chromium, perchlorate, or cyanide were either undetected or were detected at concentrations below applicable screening guidelines. Vinyl chloride was detected at a concentration of 0.606 µg/L in samples collected from MAO2MW001D, exceeding the screening criteria. There were no other parameters detected above applicable groundwater screening guidelines. Vinyl chloride has not been detected previously in this well. A summary of groundwater screening guidelines and water quality results are provided in **Table 5a**. Laboratory analytical data can be found in **Appendix C**.

8.1.3 Fall 2014 - Semiannual SWMU Groundwater Quality Network

This section summarizes the Fall 2014 semiannual groundwater sampling event conducted at SWMUs 114, SWMU 130 and SWMU 131 at Melrose AFR. Available historic data is summarized in **Table 4a – 4e** and **Table 6a – 6ai** and includes parameter summary tables and trend plots. Recent field data are provided in **Table 3b**, and recent laboratory analytical data are

provided in **Table 5b**. Discussions provided below are based on data collected during the current reporting period. As requested by NMED, this report is written and organized in general accordance with the NMED *Position Paper: General Reporting Requirements for Routine Groundwater Monitoring Activities at RCRA Sites* (NMED, 2003). As such, limited to no discussion is provided below as tables "*summarizing the groundwater and QA/QC chemical analytical data, applicable cleanup levels and modifications to the groundwater sampling program can be substituted for this section.*"

8.1.3.1 SWMU 114

Of the analyses performed, VOCs, explosives, metals, and perchlorate were undetected or were detected at concentrations below applicable screening guidelines. Cyanide was detected at an estimated concentration of 0.0023 mg/L at M114MW001, exceeding the screening criteria of 0.00145 mg/L. This parameter was also detected at estimated concentrations below the screening criteria in the other three SWMU 114 monitoring wells. All monitoring wells in SMWU 114 exceeded the hexavalent chromium screening criteria with concentrations ranging from 0.76 to 4.02 µg/L. This parameter will continue to be monitored. Hexavalent chromium was also detected although at a slightly lower concentration in the background monitoring well, MWQ-24. A summary of screening guidelines and water quality results are provided in **Table 5b**. Laboratory analytical data can be found in **Appendix C**.

8.1.3.2 SWMU 130

Of the analyses performed, VOCs, explosives, and perchlorate, were either undetected, or were detected at concentrations below applicable screening guidelines. Cyanide was reported at estimated concentrations in all SWMU 130 wells. This parameter exceeded the screening criteria of 0.00146 mg/L in monitoring wells MAO1MW001, MAO1MW003, and MAO1MW004. Hexavalent chromium was detected above the screening criteria in all SWMU 130 wells, and arsenic was detected above the screening criteria in MAO1MW004 at 1.39 µg/L. This appears consistent with the Spring sampling event. All other metals were either undetected or detected at levels below applicable screening guidelines. Hexavalent chromium and arsenic were also detected at similar concentrations in the background monitoring well, MWQ-24. A summary of groundwater screening guidelines and water quality results are provided in **Table**

5b. Laboratory analytical data can be found in **Appendix C**.

8.1.3.3 SWMU 131

Perchlorate was reported at a concentration of 14.9 µg/L at MAO2MW001D, exceeding the screening criteria of 13.82 µg/L. This exceedance is consistent with historical data at SWMU 131 and will continue to be monitored. There were no other parameters detected above applicable groundwater screening guidelines. Vinyl chloride was not detected. A summary of the results is provided in **Table 5b**. Laboratory analytical data can be found in **Appendix C**.

8.1.3.4 MWQ-24 (Background Well)

A new background monitoring well (MWQ-24), was installed in August 2013 adjacent to MWQ-10 per direction from NMED. MWQ-24 was introduced as part of the semiannual water quality network in the Fall 2013 groundwater sampling event. Of the analyses performed hexavalent chromium and arsenic are routinely reported present at concentrations above their respective screening criteria for hexavalent chromium and arsenic. A summary of groundwater screening guidelines and water quality results are provided in **Table 5b**. Laboratory analytical data can be found in **Appendix C**.

9.0 SUMMARY

Based on the information and data collected during the 2014 Groundwater Quality sampling events, the following conclusions were reached:

- Based on Trinity's review of the historical and recent 2014 groundwater analytical data, groundwater beneath Melrose AFR does not appear to be impacted by potential contaminants or activities associated with the SWMUs.
- All analytical data for the 2014 sampling event were evaluated by eDATApro. Level III Data Validation was performed by eDATApro according to guidance from *USEPA; Contract Laboratory Program, National Functional Guidelines for Organic Data Review* (USEPA, 1999), *USEPA; Contract Laboratory Program, National Functional Guidelines for Inorganic Data Review* (USEPA, 2004). Based on data validation of the 2014 sampling events, the data was determined to be valid and achieved data completeness.
- Hexavalent chromium was reported present in the majority of wells at Melrose AFR, at concentrations above the screening criteria and at concentrations similar to the recently installed background well, MWQ-24. This parameter will continue to be monitored.

This page intentionally left blank.

10.0 WORKS CITED

Burroughs, J. M. (Ed.). (1975). *Roosevelt County, History and Heritage.* Portales, NM: Bishop Printing Company.

Fallin, J. (1989). *Hydrogeology of Lower Cretaceous strata under the Southern High Plains of Texas and New Mexico*. Texas Water Development Board Report No. 314 , 39.

Foster Wheeler. (1996). *Phase I RCRA Facility Investigation for Melrose Air Force Range, Cannon Air Force Base, Clovis, New Mexico.*

Foster Wheeler. (2003). *RCRA Facility Investigation Report Addendum for Melrose Bombing Range, Cannon Air Force Base, New Mexico.*

Gustavson, T. (1996). *Fluvial and eolian depositional systems, paleosols, and paleoclimate of the upper Cenozoic Ogallala and Blackwater Draw Formations, Southern High Plains, Texas and New Mexico: Report of Investigations No. 239.* Bureau of Economic Geology, University of Texas at Austin.

Hart, D. A. (1985). *Geohydrology of the High Plains aquifer in southeastern New Mexico: U.S. Geological Survey Hydrologic Investigations Atlas HA-679.* United States Geological Survey.

Hawley, J. E. (1976). *Geohydrology of the High Plains Aquifer in Southeastern New Mexico. Hydrologic Investigation Atlas HA-679.* United States Geological Survey.

Langman, J. G. (2004). *Ground-water hydrology and water quality of the Southern High Plains aquifer, Melrose Air Force Range, Cannon Air Force Base, Curry and Roosevelt Counties, New Mexico, 2002-03: U.S. Geological Survey Scientific Investigations Report 2004-5158.* United States Geological Survey.

Lee Wan and Associates, Inc. (1990). *1990 RCRA Facility Investigation Work Plan, CAFB, New Mexico, Prepared for 27 CSG/DEC CAFB, New Mexico. Vols. I and II.*
New Mexico Administrative Code. (2005). Well Driller Licensing; Construction, Repair and Plugging of Wells, adopted August 31, 2005, 19.27.4 NMAC.

New Mexico Environment Department. (2013). *Approval Annual Ground Water Monitoring Report, December 2011, Melrose Air Force Range, Roosevelt and Curry Counties, New Mexico.*

New Mexico Environment Department. (2007). *Deferment for the Submittal of the Revised RCRA Facility Investigation Work Plan for Melrose Air Force Range.*

New Mexico Environment Department. (2003). *Position Paper: General Reporting Requirements for the Routine Groundwater Monitoring at RCRA Sites.* New Mexico Environment Department, Hazardous and Radioactive Materials Bureau.

New Mexico Environment Department. (2014). *Risk Assessment Guidance for Site Investigations and Remediation.*

Tidewater, Inc. (2009). *Draft Work Plan for Annual Groundwater Monitoring, Melrose Air Force Range, New Mexico.*

Tidewater, Inc. (2010). *Final Work Plan for Annual Groundwater Monitoring, Melrose Air Force Range, New Mexico.*

Trinity Analysis & Development Corp. (2014). *Melrose Geophysical Logging and Downhole Camera Report, Melrose Air Force Range, NM.*

Trinity Analysis & Development Corp. (2013). *December 2011, Annual Groundwater Monitoring Report, Melrose Air Force Range, Roosevelt and Curry Couties, NM.*

Trinity Analysis & Development Corp. (2011). *Ground Water Monitoring Project Work Pla, Melrose Air Force Range, NM.*

URS. (June 2009). *Final Report, Initial Baseline Groundwater Monitoring, Melrose Air Force Range, New Mexico.*

USDA. (2010). *Web Soil Survey*. Retrieved November 25, 2010, from United States Department of Agriculture, Natural Resources Conservation Service: http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm

USEPA. (2014). http://water.epa.gov/drink/info/chromium/guidance.cfm#thirteen

USEPA. (2004). *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review.* Washington, DC 20460: Office of Superfund Remediation and Technology Innovation (OSRTI) U.S. Environmental Protection Agency.

USEPA. (1999). *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review.* Washington, DC 20460: Office of Emergency and Remedial Response U.S. Environmental Protection Agency.

Weather Underground. (2014). Retrieved January 26, 2014 from Weather Undergound: http://www.wunderground.com/weatherstation/WXDailyHistory.asp?ID=MMRRN5

TABLES

This page intentionally left blank

TABLE 1
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

	Well No.	Location (State Plane)[1]		Top of Casing[1]	Ground Surface	Well Type	Stickup from ground surface	Top of Screen	Bottom of Screen	Total Well Depth	Screen Length	Sump Length	Well I.D.	Well Material	Pump	Pump Intake Depth (ft. bls)	Formation Monitored
		Easting (ft)	Northing (ft)	ft NAVD	ft NAVD		ft	ft bls	ft bls	ft bls	ft	ft	inches				
Semiannual-SWMU GW Quality Well Network	M114MW001	706827.67	1203539.67	4327.21	4324.38	MW	2.83	159.39	179.39	179.72	20.00	0.33	4.0	PVC	DBP	176.7	Chinle
	M114MW002	706680.51	1203596.93	4328.11	4325.36	MW	2.75	162.11	182.11	182.44	20.00	0.33	4.0	PVC	DBP	179.4	Chinle
	M114MW003	706662.3	1203400.5	4329.62	4326.87	MW	2.75	159.62	179.62	179.95	20.00	0.33	4.0	PVC	DBP	177.0	Chinle
	M114MW004	706963.35	1203578.69	4324.99	4322.74	MW	2.25	161.42	181.42	181.75	20.00	0.33	4.0	PVC	DBP	178.8	Chinle
	MAO1MW001	702193.7	1205363.35	4344.68	4342.68	MW	2.00	141.56	161.56	161.89	20.00	0.33	4.0	PVC	DBP	158.9	Chinle
	MAO1MW002	702321.76	1205536.48	4343.58	4341.28	MW	2.30	145.31	155.31	155.64	10.00	0.33	4.0	PVC	DBP	152.6	Chinle
	MAO1MW003	702047.46	1205516.57	4345.33	4342.58	MW	2.75	139.36	159.36	159.69	20.00	0.33	4.0	PVC	DBP	156.7	Chinle
	MAO1MW004	702257.89	1205963.87	4342.91	4340.31	MW	2.60	140.08	160.08	160.41	20.00	0.33	4.0	PVC	DBP	157.4	Chinle
	MAO2MW001D	706656.33	1199306.69	4355.90	4353.19	MW	2.71	161.95	181.95	182.28	20.00	0.33	4.0	PVC	DBP	179.3	Chinle
	MWQ-24	689675.49	1180704.95	4644.95	4643.32	MW	1.63	42.80	62.80	63.12	20.00	0.32	4.0	PVC	DBP	60.1	Ogallala
Annual GW Quality Well Network	MWQ-2	720370.93	1196505.43	4293.72	4290.43	MW	3.29	220.64	230.64	235.54	10.00	4.90	2.0	PVC	none	---	Chinle
	MWQ-14	706871.58	1193064.56	4382.11	4380.77	MW	1.34	90.70	110.70	119.93	20.00	9.23	2.0	PVC	none	---	Chinle
	MWQ-18	694417.52	1215441.23	4290.17	4288.32	MW	1.85	119.00	139.00	152.00	20.00	13.00	2.0	PVC	none	---	Ogallala
	MWQ-19	694417.52	1215441	4290.13	4288.32	MW	1.81	200.70	221.07	226.00	20.00	4.30	2.0	PVC	none	---	Chinle
	MWQ-20	694399.63	1215417.04	4290.26	4288.01	MW	2.25	256.00	296.00	297.82	40.00	1.82	2.0	PVC	none	---	Chinle
	MWQ-21	720195.67	1217791.91	4209.26	4207.40	MW	1.86	40.70	60.70	64.40	20.00	3.70	2.0	PVC	none	---	Ogallala
	MWQ-22	720195.9	1217791.8	4209.1	4207.4	MW	1.70	90.70	150.70	153.65	60.00	2.95	2.0	PVC	none	---	Ogallala/Chinle

[1] With the exception of MWQ-24 which was surveyed on September 16, 2013 all wells were surveyed or resurveyed by Lydick, Inc. between December 4, 2012 and January 2, 2013. Land surveying was completed using the New Mexico East State Plane North American Datum (NAD) 83 and North American Vertical Datum (NAVD) 88 (adjusted) in decimal feet. All horizontal coordinates were measured to the nearest fiftieth of a foot. All vertical coordinates were measured to the nearest tenth of a foot. DBP = dedicated bladder pump; MW = monitoring well; NA = not applicable; UNK=unknown

TABLE 1
SUMMARY OF WELL CONSTRUCTION DETAILS

TABLE 2
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

Well No.	TOC [2] (ft NAVD)	Screened Interval (ft bls)	DEPTH TO WATER (ft BTOC)														
			1/1/2003 [1]	1/12/2004	7/19/2004	7/18/2005	6/18/2007	1/14/2009	1/26/2010	10/24/2010	5/3/2011	9/26/2011	11/8/2012	6/1/2013	12/14/2013	4/23/2014	10/23/2014
M114MW001	4,327.21	159.39-179.39	ND	ND	ND	ND	ND	150.07	150.30	150.87	151.03	151.71	151.92	151.43	150.76	151.18	151.69
M114MW002	4,328.11	162.11-182.11	ND	ND	ND	ND	ND	150.56	150.45	150.60	150.74	151.05	150.96	150.25	151.43	150.67	150.99
M114MW003	4,329.62	159.62-179.62	ND	ND	ND	ND	ND	151.70	151.60	151.95	151.77	151.99	151.82	151.41	151.81	151.78	151.94
M114MW004 (MWQ-16)	4,324.99	161.42-181.42	148.78	149.50	148.62	148.73	148.48	149.15	149.00	149.09	149.54	150.04	149.95	149.49	149.48	149.45	149.90
M117MW001	4,359.75	UNK	ND	ND	ND	ND	ND	42.71	42.65	ND	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned
M117MW002	4,357.67	UNK	ND	ND	ND	ND	ND	40.68	41.65	ND	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned
M117MW003	4,355.55	UNK	ND	ND	ND	ND	ND	42.47	42.60	ND	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned
M117MW004	4,353.88	UNK	ND	ND	ND	ND	ND	Dry	Dry	ND	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned
MAO1MW001	4,344.68	141.56-161.56	ND	ND	ND	ND	ND	143.49	143.20	143.42	142.58	142.87	142.69	142.21	142.85	142.33	142.70
MAO1MW002	4,343.58	145.31-155.31	ND	ND	ND	ND	ND	142.65	142.40	142.75	142.44	142.49	142.70	142.03	142.79	142.38	142.73
MAO1MW003 (MWQ-17)	4,345.33	139.36-159.36	144.11	144.83	ND	ND	ND	144.20	143.90	144.03	143.43	143.72	143.63	143.34	143.81	143.42	143.68
MAO1MW004	4,342.91	140.08-160.08	ND	ND	ND	ND	ND	142.92	142.85	143.13	142.78	143.11	146.40	143.13	143.82	143.40	143.69
MAO2MW001D (MWQ-15)	4,355.90	161.95-181.95	105.20	105.62	105.28	100.66	103.83	105.53	105.72	106.29	104.56	105.63	105.57	104.64	105.29	105.56	105.65
MAO2MW001S	4,355.78	UNK	ND	ND	ND	ND	ND	Dry	Dry	Dry	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned
MAO3MW001	4,350.11	UNK	ND	ND	ND	ND	ND	42.00	ND	ND	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned
MWQ-1	4,293.60	UNK	ND	ND	ND	ND	ND	Dry	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry
MWQ-2	4,293.72	220.64-230.64	122.68	122.41	122.26	122.14	122.07	122.05	122.03	121.96	121.96	121.98	121.85	121.82	121.73	121.65	121.73
MWQ-3	4,270.78	90.70-110.70	124.04	128.31	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWQ-4	4,202.69	119.00-139.00	23.10	ND	ND	ND	39.85	ND	ND	41.78	25.09	26.12	25.86	ND	ND	ND	41.38
MWQ-5	4,234.22	201.00-221.00	56.32	56.07	55.66	ND	56.33	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWQ-6	4,273.00	256.00-296.00	84.88	ND	ND	ND	84.51	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWQ-7	4,262.68	41.00-61.00	68.61	68.92	68.99	70.28	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWQ-8	4,469.71	UNK	109.43	ND	ND	110.39	109.59	Dry	Dry	111.10	108.96	110.42	108.64	108.49	108.53	108.51	108.55
MWQ-9	4,490.64	UNK	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	Dry	ND	ND	ND	ND
MWQ-10	4,642.32	90.70-150.70	46.83	46.63	ND	41.33	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWQ-11	4,666.10	UNK	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWQ-12	4,405.77	UNK	ND	ND	ND	ND	ND	ND	ND	ND	ND	52.08	52.72	53.02	52.81	53.16	53.23
MWQ-13	4,280.51	UNK	ND	ND	ND	ND	ND	ND	ND	ND	151.83	151.41	151.56	151.24	151.20	151.59	151.56
MWQ-14	4,382.11	90.70-110.70	65.87	66.97	66.19	65.79	65.54	65.81	65.50	ND	ND	65.66	ND	65.75	65.84	65.64	ND
MWQ-18	4,290.17	119.00-139.00	ND	ND	ND	ND	100.50	101.33	124.75	101.29	101.19	101.46	101.89	102.18	102.30	102.30	102.01
MWQ-19	4,290.13	200.70-221.07	ND	ND	ND	ND	ND	101.05	100.80	102.82	99.41	ND	111.77	103.73	109.93	101.69	114.04
MWQ-20	4,290.26	256.00-296.00	ND	ND	ND	ND	83.15	83.33	106.75	83.30	83.28	83.58	83.33	81.59	83.49	84.46	83.28
MWQ-21	4,209.26	40.70-60.70	ND	ND	ND	ND	42.82	44.75	45.08	45.20	45.24	45.36	45.52	45.72	45.66	45.81	45.92
MWQ-22	4,209.12	90.70-150.70	ND	ND	ND	ND	40.02	41.90	65.88	42.34	42.41	42.49	42.63	42.70	42.47	42.60	42.78
MWQ-23	4,498.43	UNK	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWQ-24	4,644.95	42.80-62.80	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	47.64	48.52	45.96
MWL-1	4,226.02	UNK	112.01	110.89	110.90	110.88	112.30	114.00	ND	130.90	131.50	ND	ND	Dry	Dry	Dry	Dry
MWL-2	4,291.95	UNK	128.23	128.16	128.22	ND	128.37	ND	ND	ND	128.37	ND	Inaccessible [3]	Inaccessible [3]	Inaccessible [3]	Inaccessible [3]	Inaccessible [3]
MWL-3	4,226.98	UNK	57.98	58.45	58.47	ND	58.77	59.90	ND	ND	ND	ND	Inaccessible [3]	Inaccessible [3]	Inaccessible [3]	Inaccessible [3]	Inaccessible [3]
MWL-4	4,220.77	UNK	49.88	49.83	49.85	49.89	49.99	50.00	ND	50.51	50.60	50.78	51.01	51.20	51.31	51.37	51.56
MWL-5	4,196.32	UNK	12.42	ND	ND	ND	11.85	12.21	ND	13.50	12.68	14.08	13.94	13.44	12.20	12.20	13.95
MWL-6	4,304.80	UNK	116.61	116.94	117.03	117.24	117.37	118.42	118.60	118.60	118.59	118.68	118.68	118.74	118.81	118.92	118.92
MWL-7	4,258.43	UNK	74.30	74.69	74.75	74.79	74.89	74.75	ND	75.00	75.03	75.14	75.24	75.40	75.50	75.60	75.70
MWL-8	4,262.06	UNK	74.06	74.65	74.65	74.24	74.15	73.88	ND	74.10	ND	74.23	74.45	74.92	74.59	74.68	74.70
MWL-9	4,241.74	UNK	43.81	ND	ND	ND	ND	44.70	ND	45.10	45.19	45.29	45.55	45.84	45.91	46.05	46.28
MWL-10	4,573.45	UNK	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	silted up	silted up	silted up	silted up	silted up
MWL-11	4,579.80	UNK	ND	ND	ND	ND	ND	ND	ND	ND	58.79	58.64	58.73	58.55	58.52	58.92	58.82
MWL-12	4,446.85	UNK	ND	ND	ND	ND	ND	ND	ND	ND	51.78	37.18	39.05	41.21	41.74	41.90	42.03

[1] The January 2003 ground water flow data is the "median altitude of water table" between 2002 and 2003 (Langman, 2004).

[2] With the exception of MWQ-24 which was surveyed on September 16, 2013 all wells were surveyed or resurveyed by Lydick, Inc. between December 4, 2012 and January 2, 2013. Land surveying was completed using the New Mexico East State Plane North American Datum (NAD) 83 and North American Vertical Datum (NAVD) 88 (adjusted) in decimal feet. All horizontal coordinates were measured to the nearest fiftieth of a foot. All vertical coordinates were measured to the nearest tenth of a foot.

ND	No Data
NSD	No Survey Data
UNK	Unknown
4,165.24	Data is considered anamolous due to its departure from the norm. Data is not included in plots.
130.90	Pump running during measurement of water level.

[3] Located within Life-Fire Range (Active Bombing Range)

TABLE 2
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

Well No.	TOC [2] (ft NAVD)	Screened Interval (ft bls)	WATER LEVEL (ft NAVD)														
			1/1/2003 [1]	1/12/2004	7/19/2004	7/18/2005	6/18/2007	1/14/2009	1/26/2010	10/24/2010	5/3/2011	9/26/2011	11/8/2012	6/1/2013	12/14/2013	4/23/2014	10/23/2014
M114MW001	4,327.21	159.39-179.39	ND	ND	ND	ND	ND	4,177.14	4,176.91	4,176.34	4,176.18	4,175.50	4,175.29	4,175.78	4,176.45	4,176.03	4,175.52
M114MW002	4,328.11	162.11-182.11	ND	ND	ND	ND	ND	4,177.55	4,177.66	4,177.51	4,177.37	4,177.06	4,177.15	4,177.86	4,176.68	4,177.44	4,177.12
M114MW003	4,329.62	159.62-179.62	ND	ND	ND	ND	ND	4,177.92	4,178.02	4,177.67	4,177.85	4,177.63	4,177.80	4,178.21	4,177.81	4,177.84	4,177.68
M114MW004 (MWQ-16)	4,324.99	161.42-181.42	4,176.21	4,175.49	4,176.37	4,176.26	4,176.51	4,175.84	4,175.99	4,175.90	4,175.45	4,174.95	4,175.04	4,175.50	4,175.51	4,175.54	4,175.09
M117MW001	4,359.75	UNK	ND	ND	ND	ND	ND	4,317.04	4,317.10	ND	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned
M117MW002	4,357.67	UNK	ND	ND	ND	ND	ND	4,316.99	4,316.02	ND	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned
M117MW003	4,355.55	UNK	ND	ND	ND	ND	ND	4,313.08	4,312.95	ND	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned
M117MW004	4,353.88	UNK	ND	ND	ND	ND	ND	Dry	Dry	ND	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned
MAO1MW001	4,344.68	141.56-161.56	ND	ND	ND	ND	ND	4,201.19	4,201.48	4,201.26	4,202.10	4,201.81	4,201.99	4,202.47	4,201.83	4,202.35	4,201.98
MAO1MW002	4,343.58	145.31-155.31	ND	ND	ND	ND	ND	4,200.93	4,201.18	4,200.83	4,201.14	4,201.09	4,200.88	4,201.55	4,200.79	4,201.20	4,200.85
MAO1MW003 (MWQ-17)	4,345.33	139.36-159.36	4,201.22	4,200.50	ND	ND	ND	4,201.13	4,201.43	4,201.30	4,201.90	4,201.61	4,201.70	4,201.99	4,201.52	4,201.91	4,201.65
MAO1MW004	4,342.91	140.08-160.08	ND	ND	ND	ND	ND	4,199.99	4,200.06	4,199.78	4,200.13	4,199.80	4,196.51	4,199.78	4,199.09	4,199.51	4,199.22
MAO2MW001D (MWQ-15)	4,355.90	161.95-181.95	4,250.70	4,250.28	4,250.62	4,255.24	4,252.07	4,250.37	4,250.18	4,249.61	4,251.34	4,250.27	4,250.33	4,251.26	4,250.61	4,250.34	4,250.25
MAO2MW001S	4,355.78	UNK	ND	ND	ND	ND	ND	Dry	Dry	Dry	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned
MAO3MW001	4,350.11	UNK	ND	ND	ND	ND	ND	4,308.11	ND	ND	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned	abandoned
MWQ-1	4,293.60	UNK	ND	ND	ND	ND	ND	Dry	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry
MWQ-2	4,293.72	220.64-230.64	4,171.04	4,171.31	4,171.46	4,171.58	4,171.65	4,171.67	4,171.69	4,171.76	4,171.76	4,171.74	4,171.87	4,171.90	4,171.99	4,172.07	4,171.99
MWQ-3	4,270.78	90.70-110.70	4,146.74	4,142.47	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWQ-4	4,202.69	119.00-139.00	4,179.59	ND	ND	ND	4,162.84	ND	ND	4,160.91	4,177.60	4,176.57	4,176.83	ND	ND	ND	4,161.31
MWQ-5	4,234.22	201.00-221.00	4,177.90	4,178.15	4,178.56	ND	4,177.89	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWQ-6	4,273.00	256.00-296.00	4,188.12	ND	ND	ND	4,188.49	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWQ-7	4,262.68	41.00-61.00	4,194.07	4,193.76	4,193.69	4,192.40	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWQ-8	4,469.71	UNK	4,360.28	ND	ND	4,359.32	4,360.12	Dry	Dry	4,358.61	4,360.75	4,359.29	4,361.07	4,361.22	4,361.18	4,361.20	4,361.16
MWQ-9	4,490.64	UNK	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	Dry	ND	ND	ND	ND
MWQ-10	4,642.32	90.70-150.70	4,595.49	4,595.69	ND	4,600.99	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWQ-11	4,666.10	UNK	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWQ-12	4,405.77	UNK	ND	ND	ND	ND	ND	ND	ND	ND	ND	4,353.69	4,353.05	4,352.75	4,352.96	4,352.61	4,352.54
MWQ-13	4,280.51	UNK	ND	ND	ND	ND	ND	ND	ND	ND	4,128.68	4,129.10	4,128.95	4,129.27	4,129.31	4,128.92	4,128.95
MWQ-14	4,382.11	90.70-110.70	4,316.24	4,315.14	4,315.92	4,316.32	4,316.57	4,316.30	4,316.61	ND	ND	4,316.45	ND	4,316.36	4,316.27	4,316.47	ND
MWQ-18	4,290.17	119.00-139.00	ND	ND	ND	ND	4,189.67	4,188.84	4,165.42	4,188.88	4,188.98	4,188.71	4,188.28	4,187.99	4,187.87	4,187.87	4,188.16
MWQ-19	4,290.13	200.70-221.07	ND	ND	ND	ND	ND	4,189.08	4,189.33	4,187.31	4,190.72	ND	4,178.36	4,186.40	4,180.20	4,188.44	4,176.09
MWQ-20	4,290.26	256.00-296.00	ND	ND	ND	ND	4,207.11	4,206.93	4,183.51	4,206.96	4,206.98	4,206.68	4,206.93	4,208.67	4,206.77	4,205.80	4,206.98
MWQ-21	4,209.26	40.70-60.70	ND	ND	ND	ND	4,166.44	4,164.51	4,164.18	4,164.06	4,164.02	4,163.90	4,163.74	4,163.54	4,163.60	4,163.45	4,163.34
MWQ-22	4,209.12	90.70-150.70	ND	ND	ND	ND	4,169.10	4,167.22	4,143.24	4,166.78	4,166.71	4,166.63	4,166.49	4,166.42	4,166.65	4,166.52	4,166.34
MWQ-23	4,498.43	UNK	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWQ-24	4,644.95	42.80-62.80	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4,597.31	4,596.43	4,598.99
MWL-1	4,226.02	UNK	4,114.01	4,115.13	4,115.12	4,115.14	4,113.72	4,112.02	ND	4,095.12	4,094.52	ND	ND	Dry	Dry	Dry	Dry
MWL-2	4,291.95	UNK	4,163.72	4,163.79	4,163.73	ND	4,163.58	ND	ND	ND	4,163.58	ND	Inaccessible [3]	Inaccessible [3]	Inaccessible [3]	Inaccessible [3]	Inaccessible [3]
MWL-3	4,226.98	UNK	4,169.00	4,168.53	4,168.51	ND	4,168.21	4,167.08	ND	ND	ND	ND	Inaccessible [3]	Inaccessible [3]	Inaccessible [3]	Inaccessible [3]	Inaccessible [3]
MWL-4	4,220.77	UNK	4,170.89	4,170.94	4,170.92	4,170.88	4,170.78	4,170.77	ND	4,170.26	4,170.17	4,169.99	4,169.76	4,169.57	4,169.46	4,169.40	4,169.21
MWL-5	4,196.32	UNK	4,183.90	ND	ND	ND	4,184.47	4,184.11	ND	4,182.82	4,183.64	4,182.24	4,182.38	4,182.88	4,184.12	4,184.12	4,182.37
MWL-6	4,304.80	UNK	4,188.19	4,187.86	4,187.77	4,187.56	4,187.43	4,186.38	4,186.20	4,186.20	4,186.21	4,186.12	4,186.12	4,186.06	4,185.99	4,185.88	4,185.88
MWL-7	4,258.43	UNK	4,184.13	4,183.74	4,183.68	4,183.64	4,183.54	4,183.68	ND	4,183.43	4,183.40	4,183.29	4,183.19	4,183.03	4,182.93	4,182.83	4,182.73
MWL-8	4,262.06	UNK	4,188.00	4,187.41	4,187.41	4,187.82	4,187.91	4,188.18	ND	4,187.96	ND	4,187.83	4,187.61	4,187.14	4,187.47	4,187.38	4,187.36
MWL-9	4,241.74	UNK	4,197.93	ND	ND	ND	ND	4,197.04	ND	4,196.64	4,196.55	4,196.45	4,196.19	4,195.90	4,195.83	4,195.69	4,195.46
MWL-10	4,573.45	UNK	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	silted up	silted up	silted up	silted up	silted up
MWL-11	4,579.80	UNK	ND	ND	ND	ND	ND	ND	ND	ND	4,521.01	4,521.16	4,521.07	4,521.25	4,521.28	4,520.88	4,520.98
MWL-12	4,446.85	UNK	ND	ND	ND	ND	ND	ND	ND	ND	4,395.07	4,409.67	4,407.80	4,405.64	4,405.11	4,404.95	4,404.82

[1] The January 2003 ground water flow data is the "median altitude of water table" between 2002 and 2003 (Langman, 2004).

[2] With the exception of MWQ-24 which was surveyed on September 16, 2013 all wells were surveyed or resurveyed by Lydick, Inc. between December 4, 2012 and January 2, 2013. Land surveying was completed using the New Mexico East State Plane North American Datum (NAD) 83 and North American Vertical Datum (NAVD) 88 (adjusted) in decimal feet. All horizontal coordinates were measured to the nearest fiftieth of a foot. All vertical coordinates were measured to the nearest tenth of a foot.

ND	No Data
NSD	No Survey Data
UNK	Unknown
4,165.24	Anamolous data not included in plots
130.90	Pump running during measurement of water level.

[3] Located within Life-Fire Range (Active Bombing Range)

TABLE 2
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

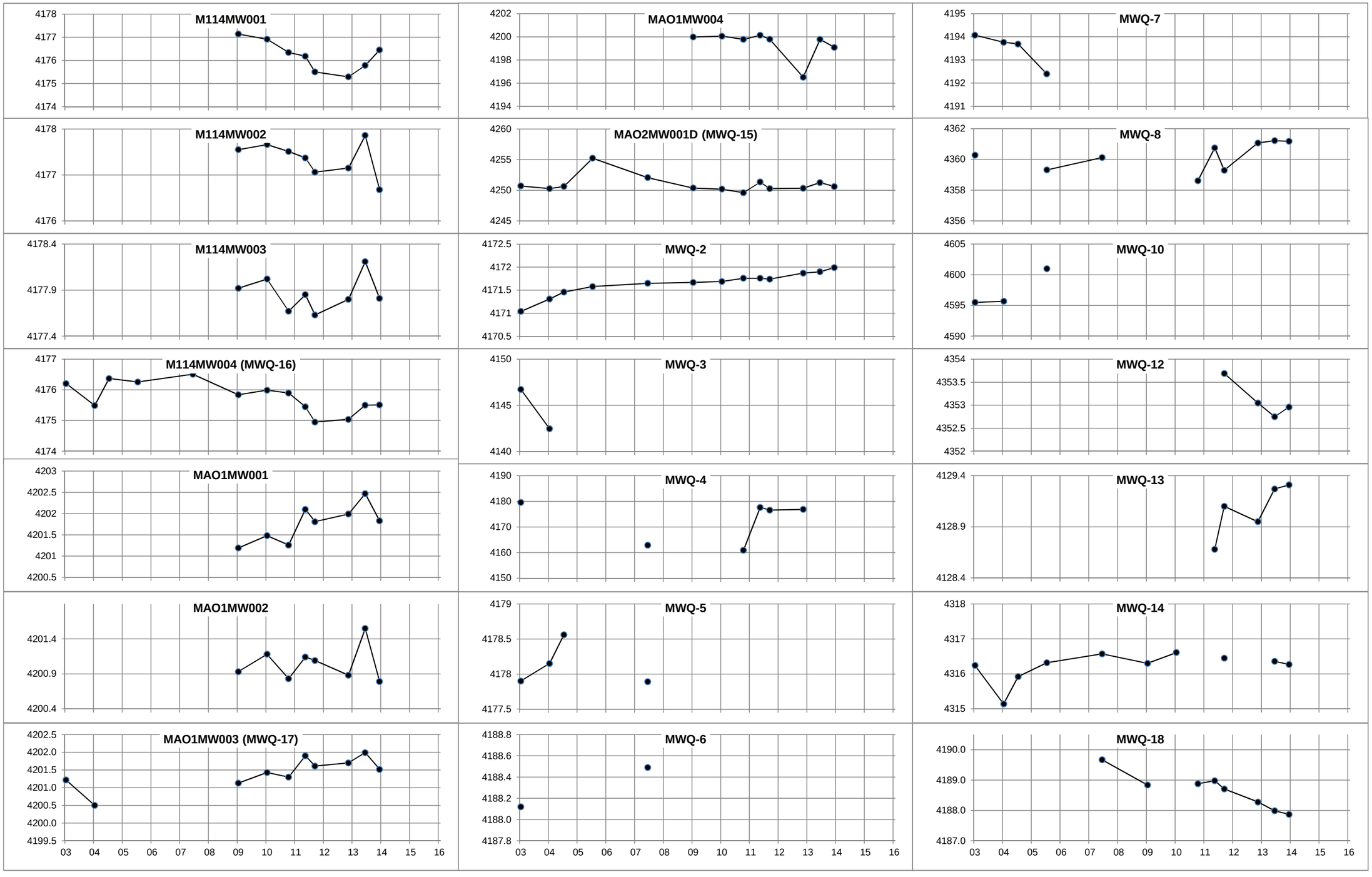


TABLE 2
SUMMARY OF GROUNDWATER ELEVATION AND DEPTH TO GROUNDWATER DATA

TABLE 2
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

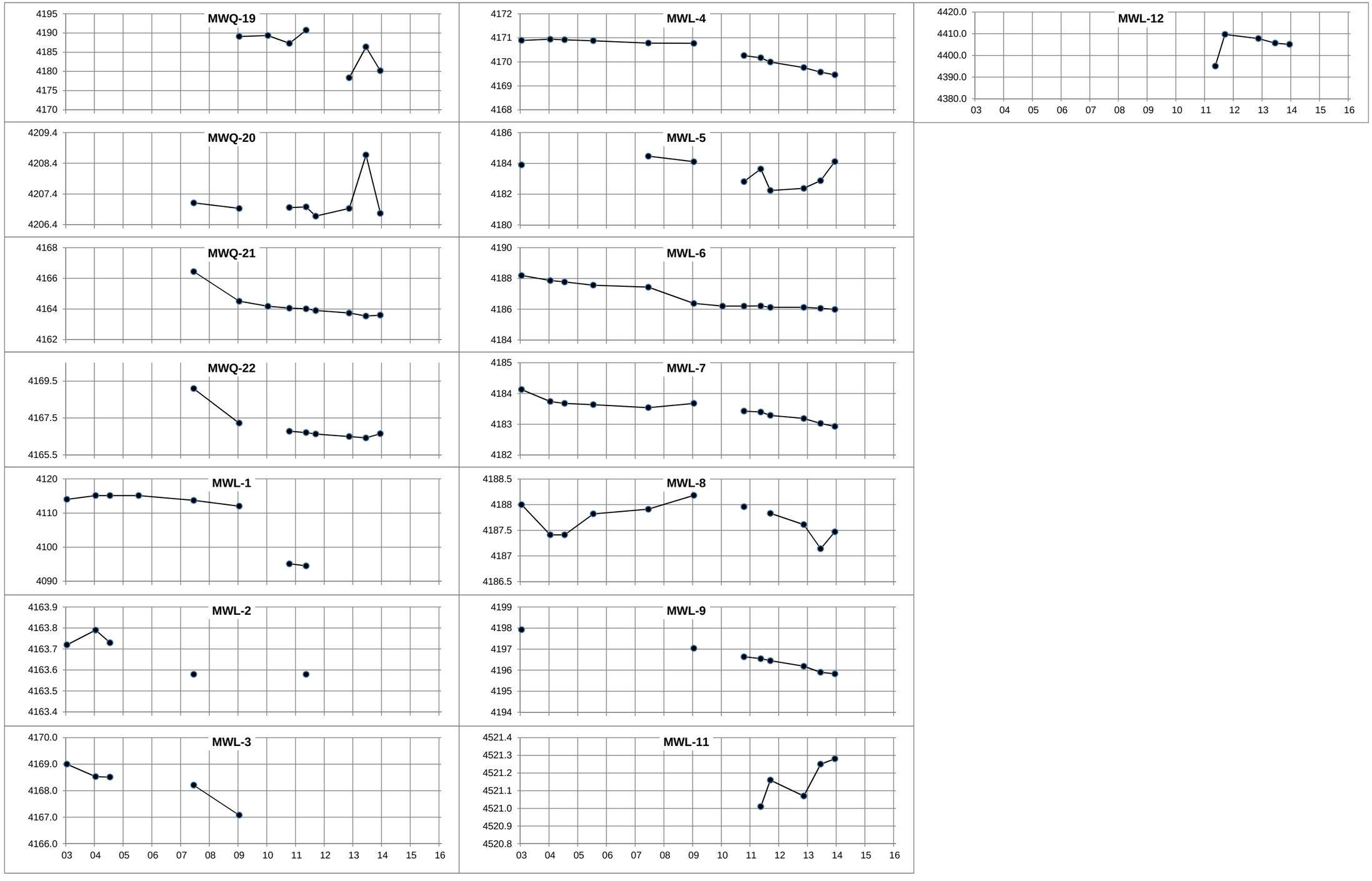


TABLE 3a
MELROSE AIR FORCE RANGE
ROOSEVELY AND CURRY COUNTIES, NEW MEXICO

						Test Site ID	M114MW001	M114MW002	M114MW003	M114MW004	MAO1MW001	MAO1MW002	MAO1MW003	MAO1MW004	MAO2MW001D
						Lab Sample No.	21404241612	21404241611	21404241609	21404241614	21404241606	21404241601	21404241605	21404241608	21404241617
						Sample Date	4/24/2014	4/24/2014	4/24/2014	4/24/2014	4/24/2014	4/23/2014	4/23/2014	4/24/2014	4/25/2014
						Sample Time	1430	1308	1200	925	1416	1006	1308	1010	1252
	Parameter	Unit	WQCC (NMAC Section 20.6.2.3103)	USEPA Drinking Water Maximum Contaminant Levels	NMED SSLs - Tapwater Screening Levels	Regional Screening Levels for Chemical Contaminants at Superfund Sites									
Field	Dissolved oxygen	mg/L	---	---	---	---	0.7	0.49	2.38	0.4	5.47	5.61	6.37	6.97	0.12
	ORP	mV	---	---	---	---	88.2	150.4	199.4	228.4	80.2	160.8	97.3	207.6	102.6
	pH	SU	6 to 9	6.5-8.5	---	---	7.83	7.84	7.77	7.77	7.86	7.76	7.72	7.78	7.9
	Specific Conductance	mS/cm	---	---	---	---	12.84	12.57	13.59	12.94	3.217	2.701	2.846	1.775	9.48
	Temperature	deg C	---	---	---	---	18.69	18.47	18.64	18.8	18.96	18.3	18.77	18.14	18.82
	Turbidity	NTU	---	---	---	---	0.1	0.17	0.14	0.29	0.33	0.12	0.22	0.2	0.1
	Water Level	ft btoc	---	---	---	---	153.47	153.89	153.41	153.22	143.92	148.7	145.33	146.81	110.64

					Test Site ID	MWQ-14	MWQ-18	MWQ-19	MWQ-2	MWQ-20	MWQ-21	MWQ-22
					Lab Sample No.	21404300909	21404300902	21404300901	21404300906	21404300910	21404300903	21404300904
					Sample Date	5/1/2014	4/29/2014	4/29/2014	4/30/2014	5/1/2014	4/29/2014	4/30/2014
					Sample Time	751	931	841	1046	1016	1241	841
	Parameter	Unit	WQCC (NMAC Section 20.6.2.3103)	USEPA Drinking Water Maximum Contaminant Levels	NMED SSLs - Tapwater Screening Levels	Regional Screening Levels for Chemical Contaminants at Superfund Sites							
Field	Dissolved oxygen	mg/L	---	---	---	---	2.29	6.2	0.48	0.31	0.21	4.91	0.34
	ORP	mV	---	---	---	---	190.7	9.11	-115.1	85.1	121.7	116.7	-145.4
	pH	SU	6 to 9	6.5-8.5	---	---	8.18	7.99	7.61	7.81	7.69	7.57	8.03
	Specific Conductance	mS/cm	---	---	---	---	3.622	0.594	6.875	10.68	16.61	1.386	1.91
	Temperature	deg C	---	---	---	---	17.33	17.9	17.77	18.27	17.99	17.54	16.84
	Turbidity	NTU	---	---	---	---	0.98	3.11	2.14	1.01	10.4	38.10	4.14
	Water Level	ft btoc	---	---	---	---	67.61	102.72	117.4	134.4	98.31	45.84	46.09

Notes: Laboratory: Gulf Coast Analytical Laboratory, Baton Rogue, LA; Sampling performed by Trinity Analysis & Development Corp.
NM= not measured
--- = no standard

TABLE 3b
MELROSE AIR FORCE RANGE
ROOSEVELY AND CURRY COUNTIES, NEW MEXICO

						Test Site ID	**M114MW001**	**M114MW002**	**M114MW003**	**M114MW004**	**MAO1MW001**	**MAO1MW002**	**MAO1MW003**	**MAO1MW004**	**MAO2MW001D**	**MWQ-24**
						Lab Sample No.	21410220514	21410220509	21410220511	21410220512	21410220503	21410220501	21410220507	21410220504	21410220520	21410220515
						Sample Date	10/22/2014	10/22/2014	10/22/2014	10/22/2014	10/21/2014	10/21/2014	10/21/2014	10/21/2014	10/23/2014	10/23/2014
						Sample Time	0.524305556	0.399305556	0.465277778	0.434027778	0.513888889	0.444444444	0.518055556	0.458333333	0.488194444	0.397222222
	Parameter	**Unit**	**WQCC (NMAC Section 20.6.2.3103)**	**USEPA Drinking Water Maximum Contaminant Levels**	**NMED SSLs - Tapwater Screening Levels**	**Regional Screening Levels for Chemical Contaminants at Superfund Sites**										
Field	Dissolved oxygen	mg/L	---	---	---	---	0.26	0.63	2.61	0.42	5.48	5.77	6.26	7.22	0.10	7.28
	ORP	mV	---	---	---	---	67.9	196.7	134.3	139.4	121.7	146.7	86.8	105.0	150.1	212.8
	pH	SU	6 to 9	6.5-8.5	---	---	7.6	7.92	8.13	7.61	7.79	7.83	7.85	7.85	7.83	7.16
	Specific Conductance	mmhos/cm	---	---	---	---	10.89	12.73	13.72	12.60	3.260	2.800	2.871	1.875	10.01	0.540
	Temperature	deg C	---	---	---	---	18.56	18.17	18.81	18.33	18.39	18.88	18.29	18.33	18.39	17.11
	Turbidity	NTU	---	---	---	---	0.15	0.14	0.42	0.35	0.22	0.80	0.09	0.11	0.21	0.21
	Water Level	ft btoc	---	---	---	---	151.69	150.99	151.94	149.90	142.70	142.73	143.68	143.69	105.65	45.96

Notes: Laboratory: Gulf Coast Analytical Laboratory, Baton Rogue, LA; Sampling performed by Trinity Analysis & Development Corp.
NM= not measured
--- = no standard

TABLE 4a
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

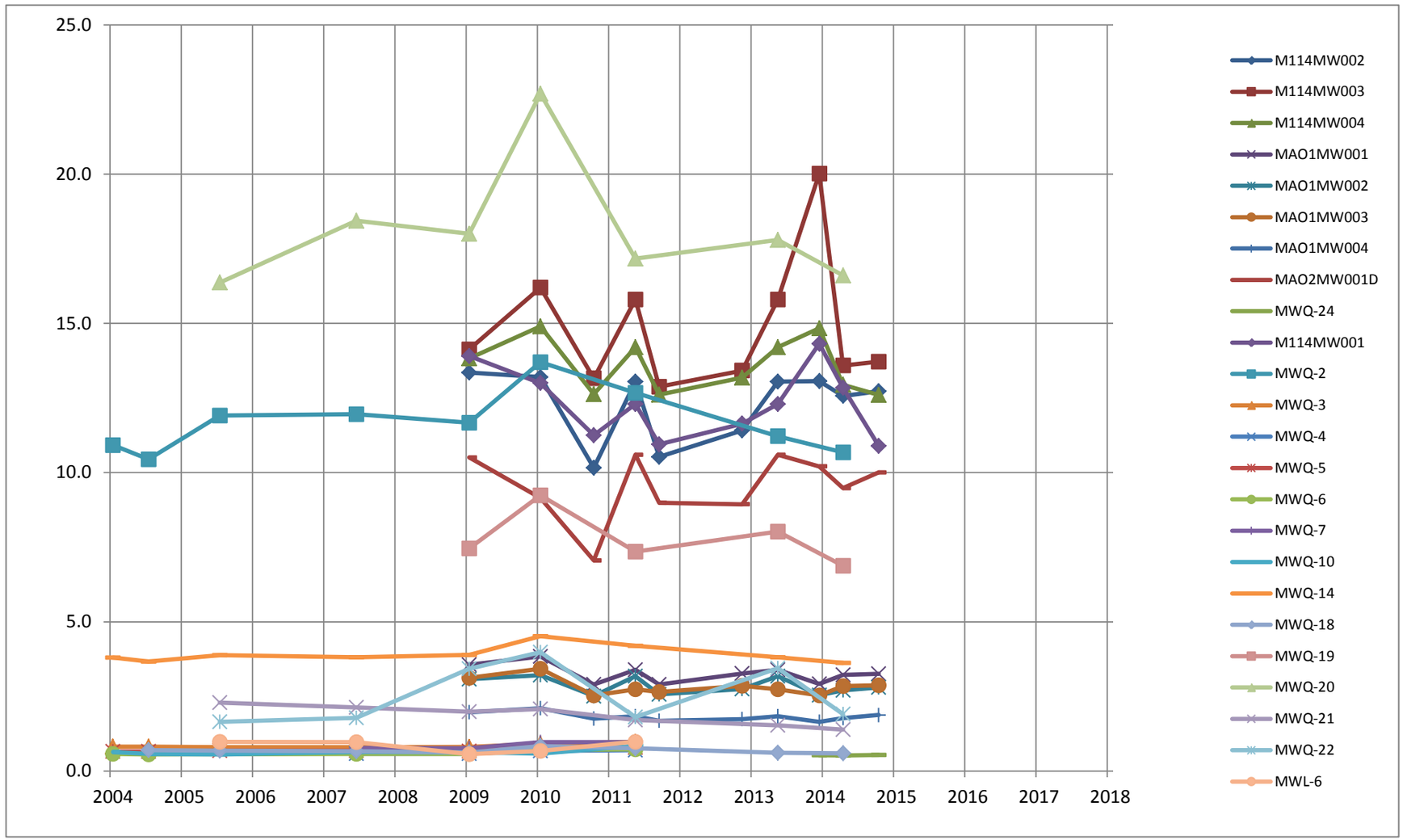
DATE	Semiannual Network										
	SWMU 114				SWMU 130				SWMU 131		
	M114MW001	M114MW002	M114MW003	M114MW004	MAO1MW001	MAO1MW002	MAO1MW003	MAO1MW004	MAO2MW001D	MWQ-23	MWQ-24
Jan-04											
Jul-04											
Jul-05											
Jun-07											
Jan-09	13.910	13.350	14.130	13.830	3.561	3.082	3.124	1.966	10.510		
Jan-10	13.0	13.2	16.2	14.9	3.84	3.21	3.43	2.10	9.15		
Oct-10	11.25	10.16	13.16	12.63	2.9	2.51	2.53	1.75	7.06		
May-11	12.30	13.05	15.8	14.2	3.387	3.174	2.741	1.834	10.60	2.442	
Sep-11	10.95	10.53	12.88	12.61	2.90	2.57	2.65	1.681	8.99	1.87	
Nov-12	11.64	11.41	13.42	13.18	3.27	2.749	2.856	1.740	8.94	0.538	
May-13	12.3	13.05	15.8	14.2	3.39	3.174	2.741	1.834	10.6		
Dec-13	14.32	13.07	20.02	14.84	2.92	2.542	2.53	1.650	10.21		0.532
Apr-14	12.84	12.57	13.59	12.94	3.22	2.701	2.846	1.775	9.48		0.519
Oct-14	10.89	12.73	13.72	12.6	3.26	2.8	2.871	1.875	10.01		0.54
Min	10.9	10.2	12.9	12.6	2.9	2.5	2.5	1.7	7.1	0.5	0.5
Max	14.3	13.4	20.0	14.9	3.8	3.2	3.4	2.1	10.6	2.4	0.5
Average	12.3	12.3	14.9	13.6	3.3	2.9	2.8	1.8	9.6	1.6	0.5

Notes:
Data in mS/cm
NMED SSL Tapwater Screening Level: N/A
Red indicates exceedance
Blank cells indicate no data
Wells MWQ-3, -4, -5, -6, -7, -10, -23, and MWL-6 not sampled after spring 2011

DATE	Annual Network													
						Background	Background							
	MWQ-2	MWQ-3	MWQ-4	MWQ-5	MWQ-6	MWQ-7	MWQ-10	MWQ-14	MWQ-18	MWQ-19	MWQ-20	MWQ-21	MWQ-22	MWL-6
Jan-04	10.92	0.819		0.654	0.572		0.636	3.80						
Jul-04	10.45	0.812		0.656	0.560		0.574	3.67	0.699					
Jul-05	11.91	0.8		0.683			0.558	3.880	0.681		16.370	2.290	1.646	0.979
Jun-07	11.960	0.796	0.584	0.679	0.578	0.769	0.639	3.810	0.667		18.440	2.130	1.777	0.971
Jan-09	11.670	0.807	0.580	0.665	0.576	0.764	0.631	3.890	0.618	7.459	18.000	1.991	3.431	0.566
Jan-10	13.7	0.910	0.674	0.766	0.697	0.969	0.579	4.52	0.836	9.24	22.7	2.08	3.980	0.672
Oct-10														
May-11	12.67	0.979	0.702	0.793	0.726	0.971	0.846	4.197	0.763	7.353	17.17	1.706	1.809	0.981
Sep-11														
Nov-12														
May-13	11.22							3.812	0.609	8.02	17.8	1.533	3.44	
Dec-13														
Apr-14	10.68							3.622	0.594	6.875	16.61	1.386	1.91	
Oct-14														
Min	10.5	0.8	0.6	0.7	0.6	0.8	0.6	3.6	0.6	6.9	16.4	1.4	1.6	0.6
Max	13.7	1.0	0.7	0.8	0.7	1.0	0.8	4.5	0.8	9.2	22.7	2.3	4.0	1.0
Average	11.7	0.8	0.6	0.7	0.6	0.87	0.64	3.9	0.7	7.8	18.2	1.9	2.6	0.8

TABLE 4a
SPECIFIC CONDUCTANCE

TABLE 4a
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

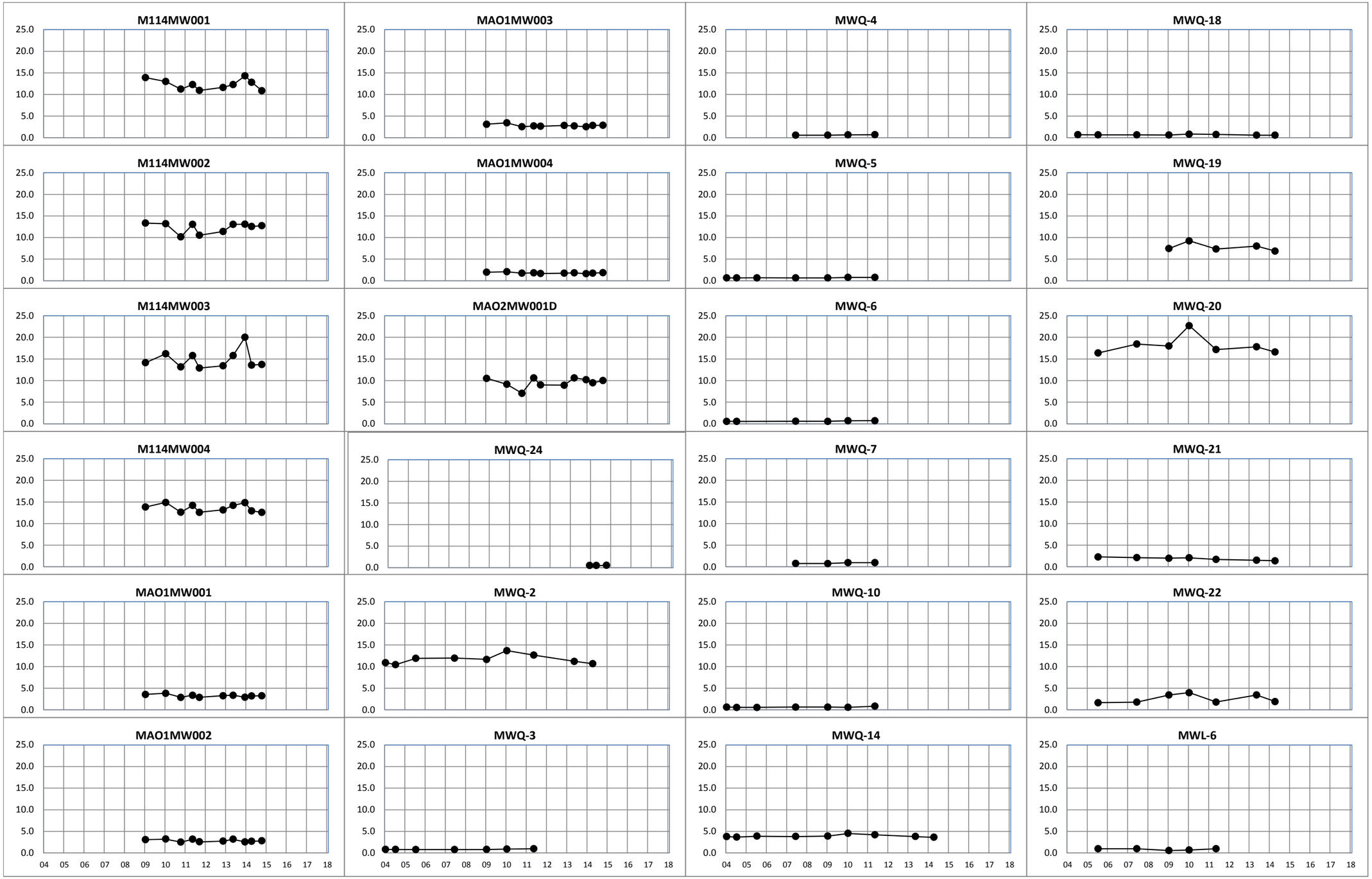


Notes:

Data in mS/cm

TABLE 4a
SPECIFIC CONDUCTANCE

TABLE 4a
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO



Notes:
Data in mS/cm

TABLE 4b
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

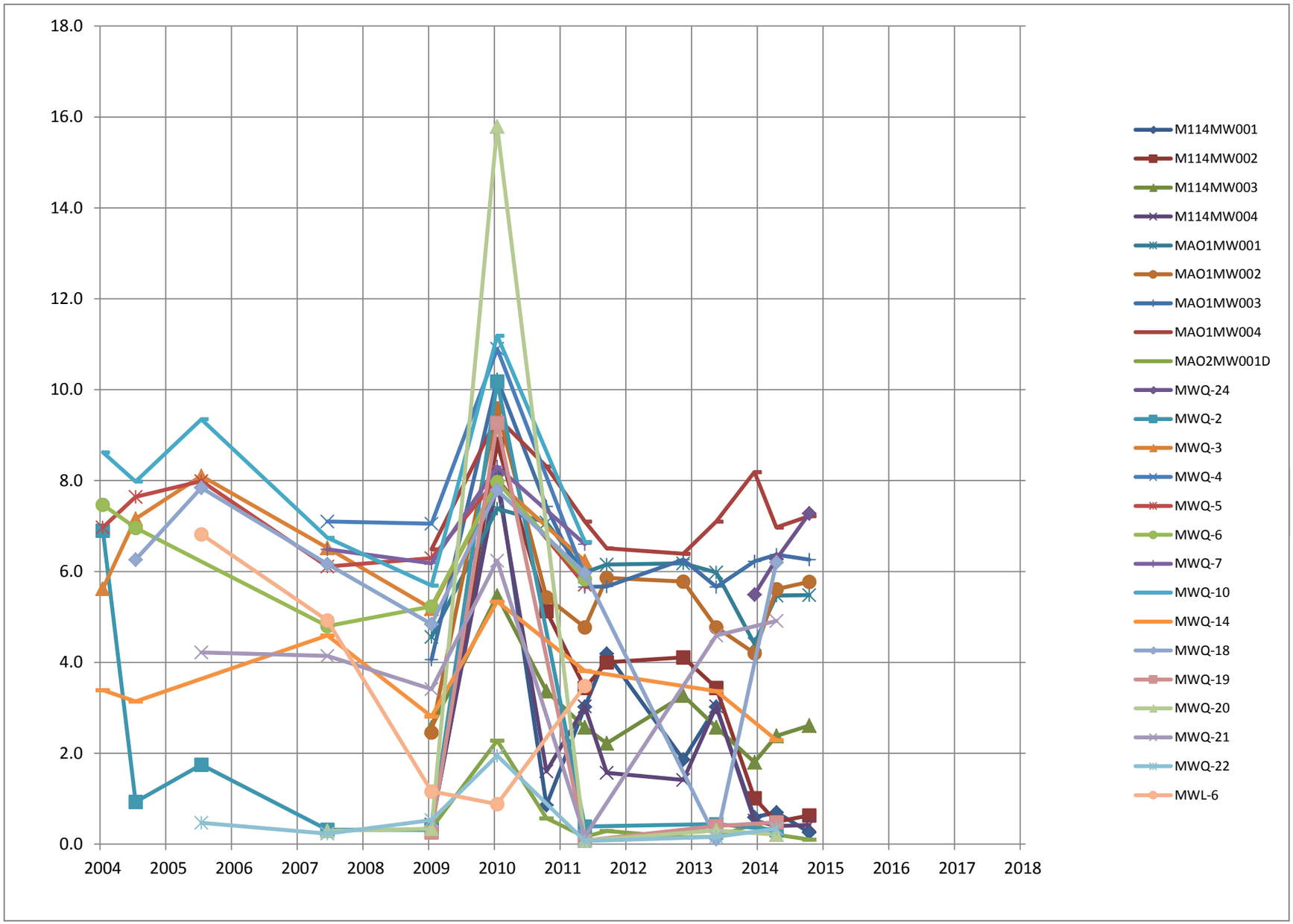
DATE	Semiannual Network										
	SWMU 114				SWMU 130				SWMU 131		
	M114MW001	M114MW002	M114MW003	M114MW004	MAO1MW001	MAO1MW002	MAO1MW003	MAO1MW004	MAO2MW001D	MWQ-23	MWQ-24
Jan-04											
Jul-04											
Jul-05											
Jun-07											
Jan-09	0.37	0.40	2.57	0.43	4.56	2.46	4.06	6.49	0.35		
Jan-10	8.18	8.81	5.47	7.98	7.38	9.59	10.23	9.39	2.28		
Oct-10	0.86	5.13	3.37	1.60	7.08	5.43	7.43	8.31	0.57		
May-11	3.02	3.44	2.57	3.03	5.98	4.77	5.66	7.1	0.16	0.12	
Sep-11	4.19	4.00	2.22	1.57	6.15	5.86	5.67	6.51	0.29	0.23	
Nov-12	1.86	4.11	3.27	1.41	6.18	5.78	6.26	6.39	0.15	6.51	
May-13	3.02	3.44	2.57	3.03	5.98	4.77	5.66	7.1	0.16		
Dec-13	0.59	1.01	1.8	0.52	4.41	4.2	6.22	8.19	0.44		5.49
Apr-14	0.7	0.49	2.38	0.4	5.47	5.61	6.37	6.97	0.21		6.27
Oct-14	0.26	0.63	2.61	0.42	5.48	5.77	6.26	7.22	0.1		7.28
Min	0.26	0.40	1.80	0.40	4.41	2.46	4.06	6.39	0.10	0.12	5.49
Max	8.18	8.81	5.47	7.98	7.38	9.59	10.23	9.39	2.28	6.51	7.28
Average	2.31	3.15	2.88	2.04	5.87	5.42	6.38	7.37	0.47	2.29	6.35

Notes:
Data in mg/L
NMED SSL Tapwater Screening Level: N/A
Red indicates exceedance
Blank cells indicate no data
Wells MWQ-3, -4, -5, -6, -7, -10, -23, and MWL-6 not sampled after spring 2011

DATE	Annual Network													
						Background	Background							
	MWQ-2	MWQ-3	MWQ-4	MWQ-5	MWQ-6	MWQ-7	MWQ-10	MWQ-14	MWQ-18	MWQ-19	MWQ-20	MWQ-21	MWQ-22	MWL-6
Jan-04	6.90	5.62		6.97	7.47		8.62	3.39						
Jul-04	0.93	7.16		7.64	6.96		7.98	3.14	6.26					
Jul-05	1.75	8.10		7.99			9.35		7.84			4.22	0.47	6.82
Jun-07	0.32	6.52	7.10	6.11	4.80	6.49	6.74	4.59	6.16		0.29	4.14	0.23	4.92
Jan-09	0.31	5.18	7.05	6.29	5.23	6.18	5.69	2.81	4.84	0.26	0.34	3.41	0.53	1.16
Jan-10	10.18	7.97	10.90	8.03	7.97	8.31	11.19	5.34	7.79	9.27	15.79	6.24	1.95	0.88
Oct-10														
May-11	0.39	6.23	5.89	5.71	5.83	6.6	6.65	3.81	5.96	0.08	0.08	0.17	0.07	3.48
Sep-11														
Nov-12														
May-13	0.44							3.37	0.11	0.40	0.30	4.59	0.16	
Dec-13														
Apr-14	0.31							2.29	6.2	0.48	0.21	4.91	0.34	
Oct-14														
Min	0.31	5.18	5.89	5.71	4.80	6.18	5.69	2.29	0.11	0.08	0.08	0.17	0.07	0.88
Max	10.18	8.10	10.90	8.03	7.97	8.31	11.19	5.34	7.84	9.27	15.79	6.24	1.95	6.82
Average	2.39	6.68	7.74	6.96	6.38	6.90	8.03	3.59	5.65	2.10	2.84	3.95	0.54	3.45

TABLE 4b
DISSOLVED OXYGEN

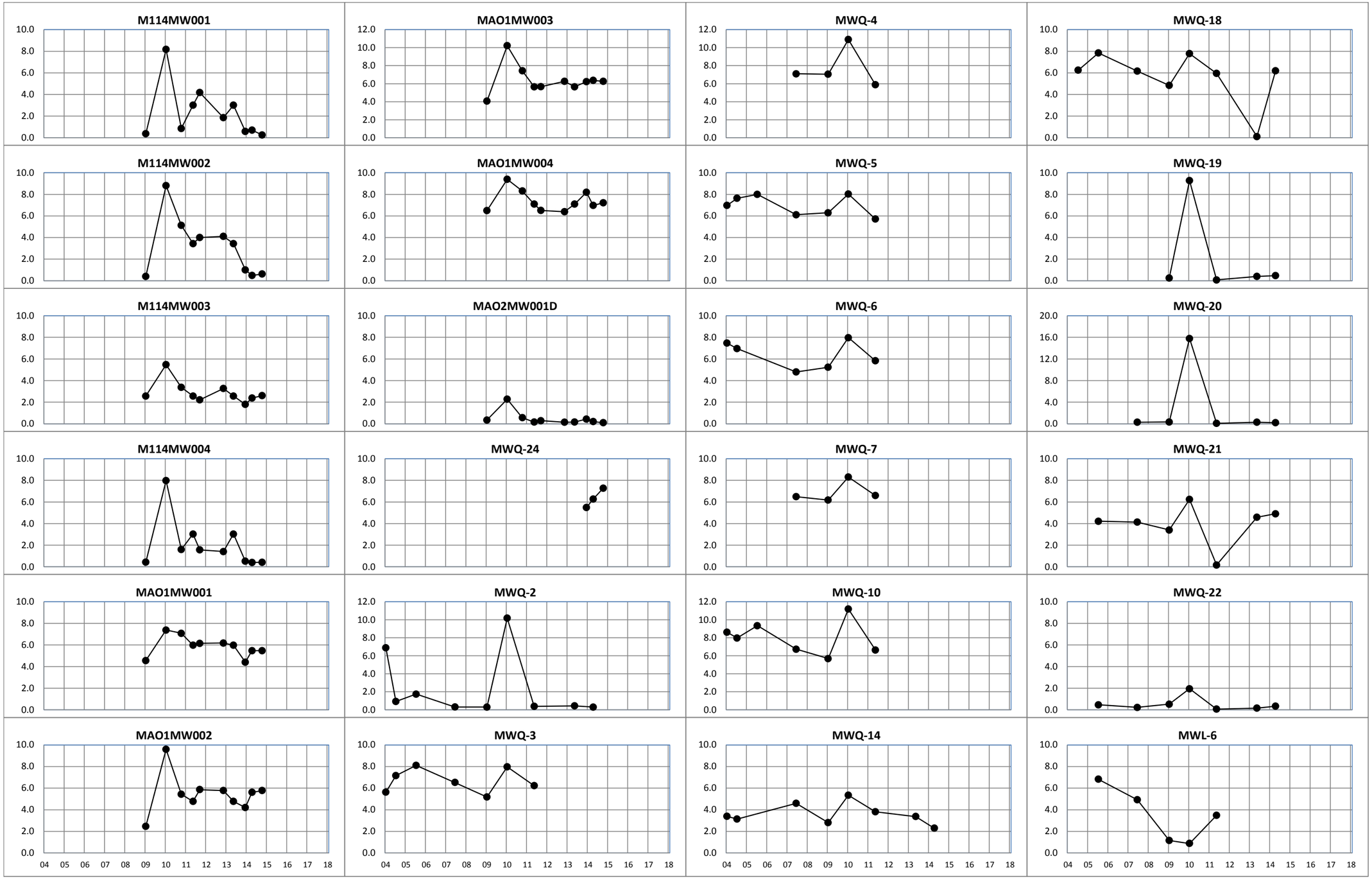
TABLE 4b
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO



Notes:
Data in mg/L

TABLE 4b
DISSOLVED OXYGEN

TABLE 4b
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO



Notes:
Data in mg/L

TABLE 4c
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

DATE	Semiannual Network										
	SWMU 114				SWMU 130				SWMU 131		
	M114MW001	M114MW002	M114MW003	M114MW004	MAO1MW001	MAO1MW002	MAO1MW003	MAO1MW004	MAO2MW001D	MWQ-23	MWQ-24
Jan-04											
Jul-04											
Jul-05											
Jun-07											
Jan-09	7.80	7.80	7.92	7.70	7.81	7.99	7.81	7.87	7.72		
Jan-10	5.64	5.58	5.65	5.58	5.61	8.92	8.36	8.32	8.12		
Oct-10	7.48	7.71	7.47	7.63	7.79	7.83	7.64	7.59	7.43		
May-11	7.73	7.52	7.62	7.95	7.73	8.07	7.09	7.08	7.92	7.88	
Sep-11	8.11	7.98	8.13	8.04	8.11	8.33	8.07	8.11	8.01	8.30	
Nov-12	7.78	8.02	8.08	7.87	8.18	8.18	7.95	7.99	8.05	7.95	
May-13	7.73	7.52	7.62	7.95	7.73	8.07	7.09	7.08	7.92		
Dec-13	7.6	7.82	7.57	7.52	7.6	7.77	7.93	8.03	7.88		7.81
Apr-14	7.83	7.84	7.77	7.77	7.86	7.76	7.72	7.78	7.90		7.67
Oct-14	7.6	7.92	8.13	7.61	7.79	7.83	7.85	7.85	7.83		7.16
Min	5.64	5.58	5.65	5.58	5.61	7.76	7.09	7.08	7.43	7.88	7.16
Max	8.11	8.02	8.13	8.04	8.18	8.92	8.36	8.32	8.12	8.30	7.81
Average	7.53	7.57	7.60	7.56	7.62	8.08	7.75	7.77	7.88	8.04	7.55

Notes:

Data in std units

NMED SSL Tapwater Screening Level: N/A

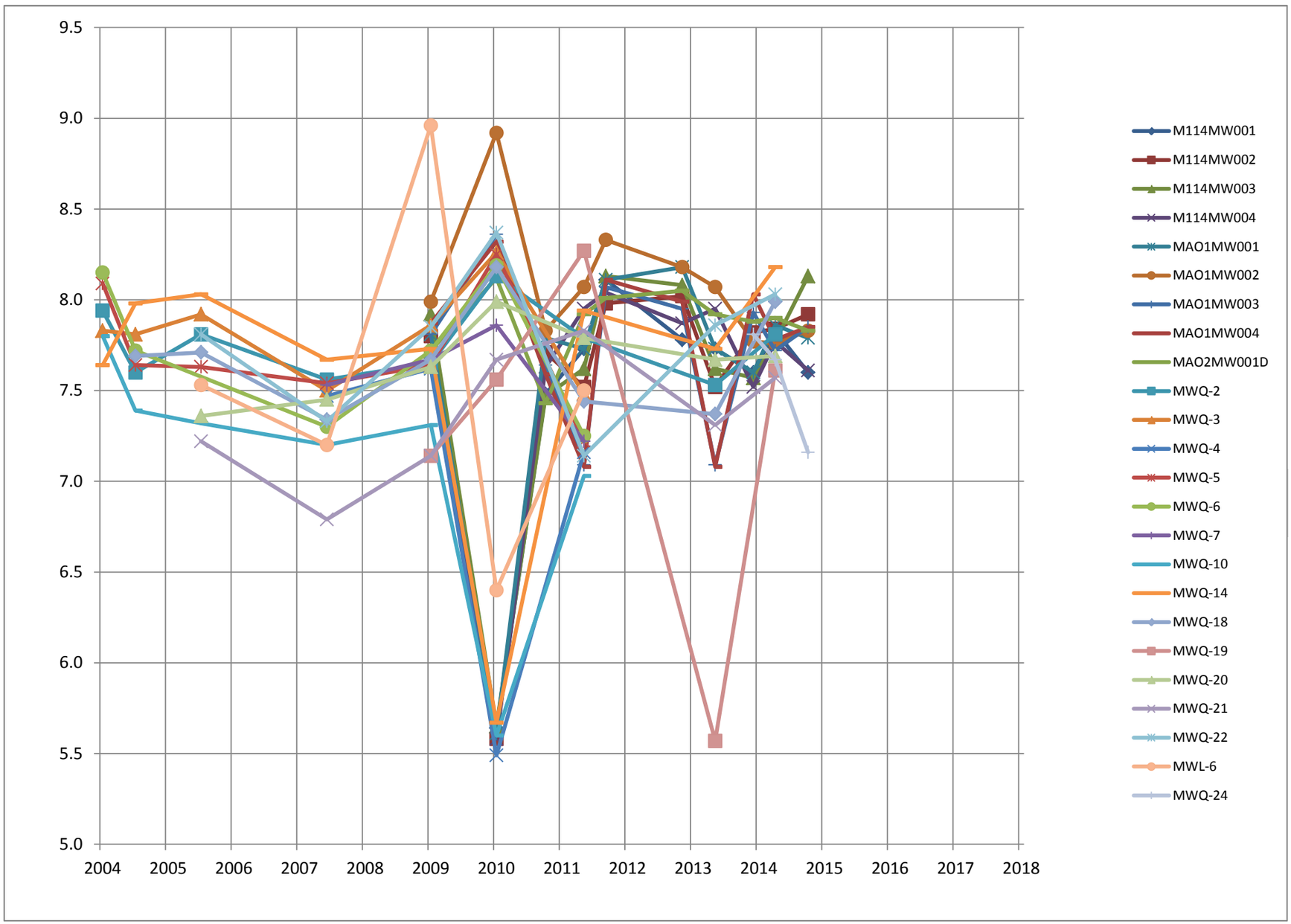
Red indicates exceedance

Blank cells indicate no data

Wells MWQ-3, -4, -5, -6, -7, -10, -23, and MWL-6 not sampled after spring 2011

DATE	Annual Network													
						Background	Background							
	MWQ-2	MWQ-3	MWQ-4	MWQ-5	MWQ-6	MWQ-7	MWQ-10	MWQ-14	MWQ-18	MWQ-19	MWQ-20	MWQ-21	MWQ-22	MWL-6
Jan-04	7.94	7.83		8.09	8.15		7.80	7.64						
Jul-04	7.60	7.81		7.64	7.72		7.39	7.98	7.69					
Jul-05	7.81	7.92		7.63			7.32	8.03	7.71		7.360	7.22	7.81	7.53
Jun-07	7.56	7.50	7.47	7.54	7.30	7.53	7.20	7.67	7.34		7.45	6.79	7.33	7.20
Jan-09	7.65	7.86	7.62	7.64	7.72	7.67	7.31	7.73	7.67	7.14	7.63	7.14	7.85	8.96
Jan-10	8.13	8.26	5.49	8.25	8.19	7.86	5.60	5.67	8.18	7.56	7.99	7.67	8.37	6.40
Oct-10														
May-11	7.79	7.48	7.16	7.22	7.25	7.22	7.03	7.94	7.44	8.27	7.79	7.83	7.14	7.5
Sep-11														
Nov-12														
May-13	7.53							7.73	7.37	5.57	7.67	7.31	7.86	
Dec-13														
Apr-14	7.81							8.18	7.99	7.61	7.69	7.57	8.03	
Oct-14														
Min	7.53	7.48	5.49	7.22	7.25	7.22	5.60	5.67	7.34	5.57	7.36	6.79	7.14	6.40
Max	8.13	8.26	7.62	8.25	8.19	7.86	7.80	8.18	8.18	8.27	7.99	7.83	8.37	8.96
Average	7.76	7.81	6.94	7.72	7.72	7.57	7.09	7.62	7.67	7.23	7.65	7.36	7.77	7.52

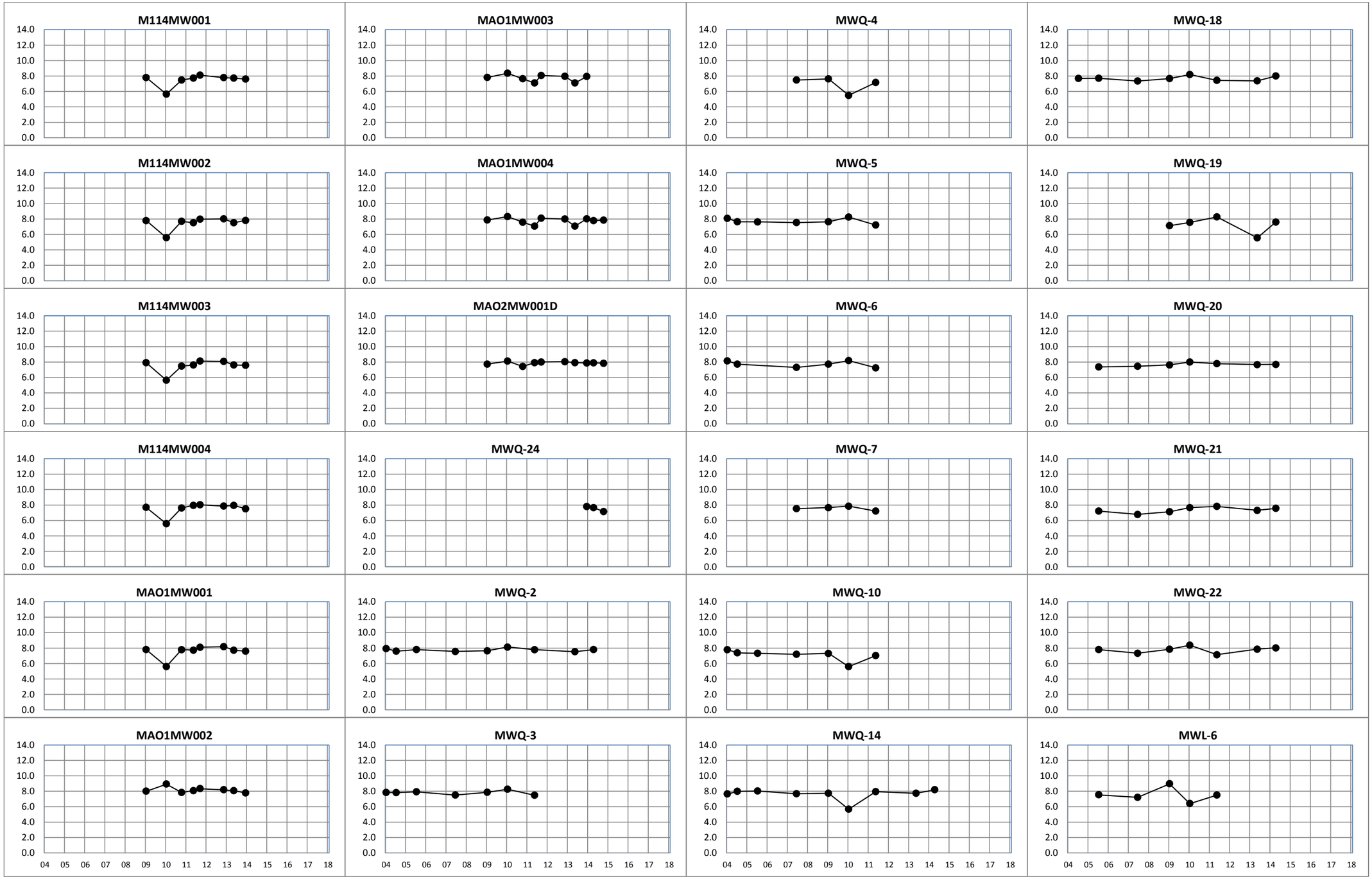
TABLE 4c
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO



Notes:
Data in std units

TABLE 4c
pH

TABLE 4c
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO



Notes:
Data in mS/cm

TABLE 4d
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

DATE	Semiannual Network										
	SWMU 114				SWMU 130				SWMU 131		
	M114MW001	M114MW002	M114MW003	M114MW004	MAO1MW001	MAO1MW002	MAO1MW003	MAO1MW004	MAO2MW001D	MWQ-23	MWQ-24
Jan-04											
Jul-04											
Jul-05											
Jun-07											
Jan-09	16.19	15.29	16.44	12.15	17.03	17.60	17.67	17.06	16.52		
Jan-10	17.90	18.00	16.40	17.40	17.30	15.72	16.71	15.66	14.77		
Oct-10	19.77	18.5	20.72	18.51	20.4	20.88	20.98	19.71	20.19		
May-11	23.56	22.4	21.67	22.51	22.95	21.94	22.69	21.43	19.88	19.45	
Sep-11	23.03	21.64	22.06	21.61	20.91	22.58	23.27	21.76	20.92	19.97	
Nov-12	21.68	20.84	20.53	20.42	22.13	21.05	20.56	21.49	19.75	17.18	
May-13	23.56	22.4	21.67	22.51	22.95	21.94	22.69	21.43	19.88		
Dec-13	17.78	16.41	17.57	17.86	15.84	16.79	15.26	15.47	16.1		15.57
Apr-14	18.69	18.47	18.64	18.80	18.96	18.30	18.77	18.14	18.82		17.55
Oct-14	18.56	18.17	18.81	18.33	18.39	18.88	18.26	18.33	18.39		17.11
Min	16.19	15.29	16.40	12.15	15.84	15.72	15.26	15.47	14.77	17.18	15.57
Max	23.56	22.40	22.06	22.51	22.95	22.58	23.27	21.76	20.92	19.97	17.55
Average	20.07	19.21	19.45	19.01	19.69	19.57	19.69	19.05	18.52	18.87	16.74

Notes:

Data in degrees Celsius

NMED SSL Tapwater Screening Level: N/A

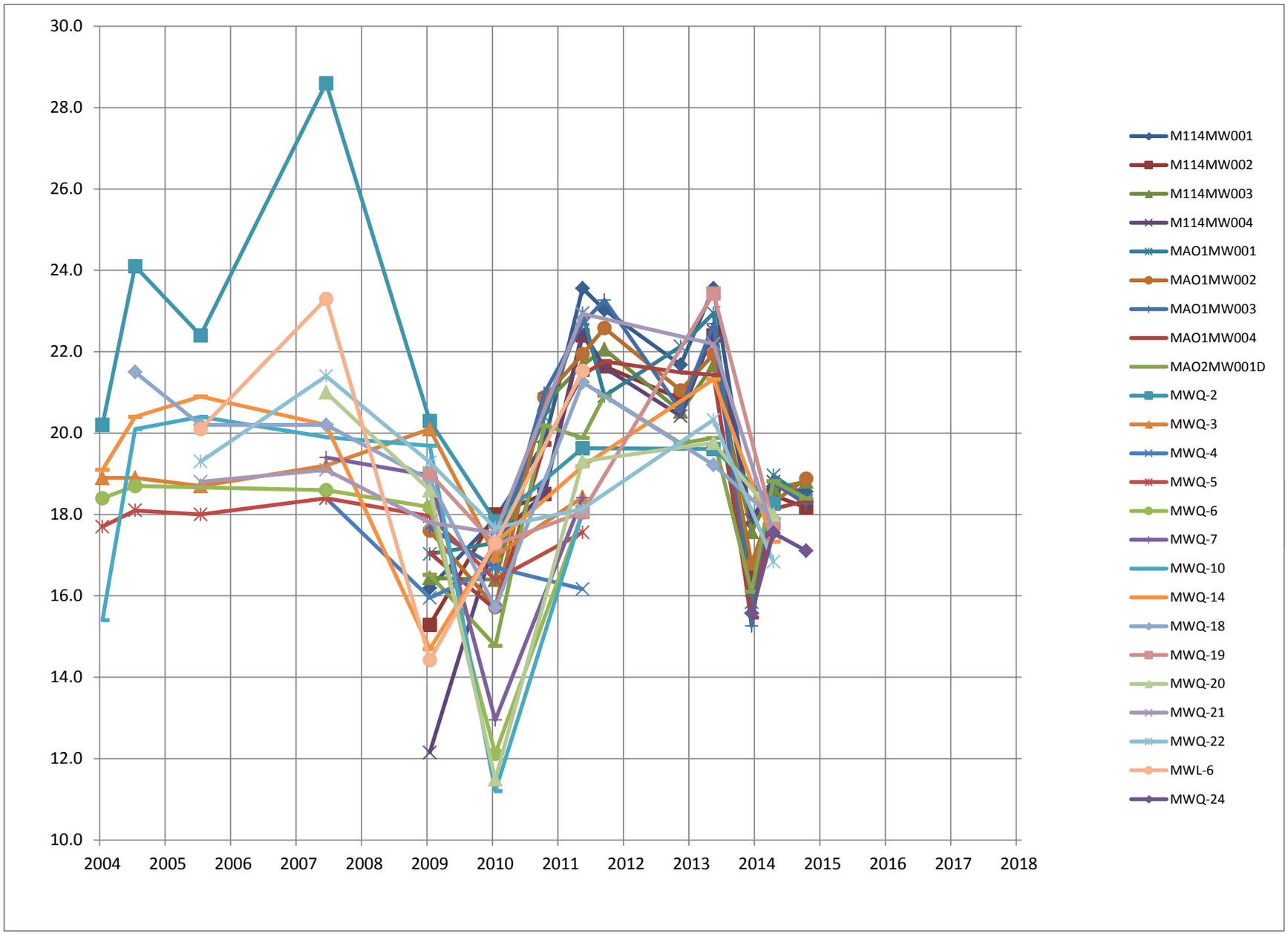
Red indicates exceedance

Blank cells indicate no data

Wells MWQ-3, -4, -5, -6, -7, -10, -23, and MWL-6 not sampled after spring 2011

DATE	Annual Network													
						Background	Background							
	MWQ-2	MWQ-3	MWQ-4	MWQ-5	MWQ-6	MWQ-7	MWQ-10	MWQ-14	MWQ-18	MWQ-19	MWQ-20	MWQ-21	MWQ-22	MWL-6
Jan-04	20.20	18.90		17.70	18.40		15.40	19.10						
Jul-04	24.10	18.90		18.10	18.70		20.10	20.40	21.50					
Jul-05	22.40	18.70		18.00			20.40	20.90	20.20			18.80	19.30	20.10
Jun-07	28.60	19.20	18.40	18.40	18.60	19.40	19.90	20.20	20.20		21.00	19.10	21.40	23.30
Jan-09	20.30	20.10	15.95	17.96	18.18	18.96	19.69	14.69	18.85	19.01	18.60	17.80	19.28	14.42
Jan-10	17.84	16.98	16.70	16.39	12.12	12.95	11.20	17.30	15.71	17.26	11.49	17.54	17.67	17.30
Oct-10														
May-11	19.63	18.42	16.17	17.56	18.05	18.41	18.05	19.18	21.25	18.06	19.31	22.93	18.14	21.53
Sep-11														
Nov-12														
May-13	19.61							21.32	19.22	23.43	19.76	22.19	20.33	
Dec-13														
Apr-14	18.27							17.33	17.90	17.77	17.99	17.54	16.84	
Oct-14														
Min	17.84	16.98	15.95	16.39	12.12	12.95	11.20	14.69	15.71	17.26	11.49	17.54	16.84	14.42
Max	28.60	20.10	18.40	18.40	18.70	19.40	20.40	21.32	21.50	23.43	21.00	22.93	21.40	23.30
Average	21.22	18.74	16.81	17.73	17.34	17.43	17.82	18.94	19.35	19.11	18.03	19.41	18.99	19.33

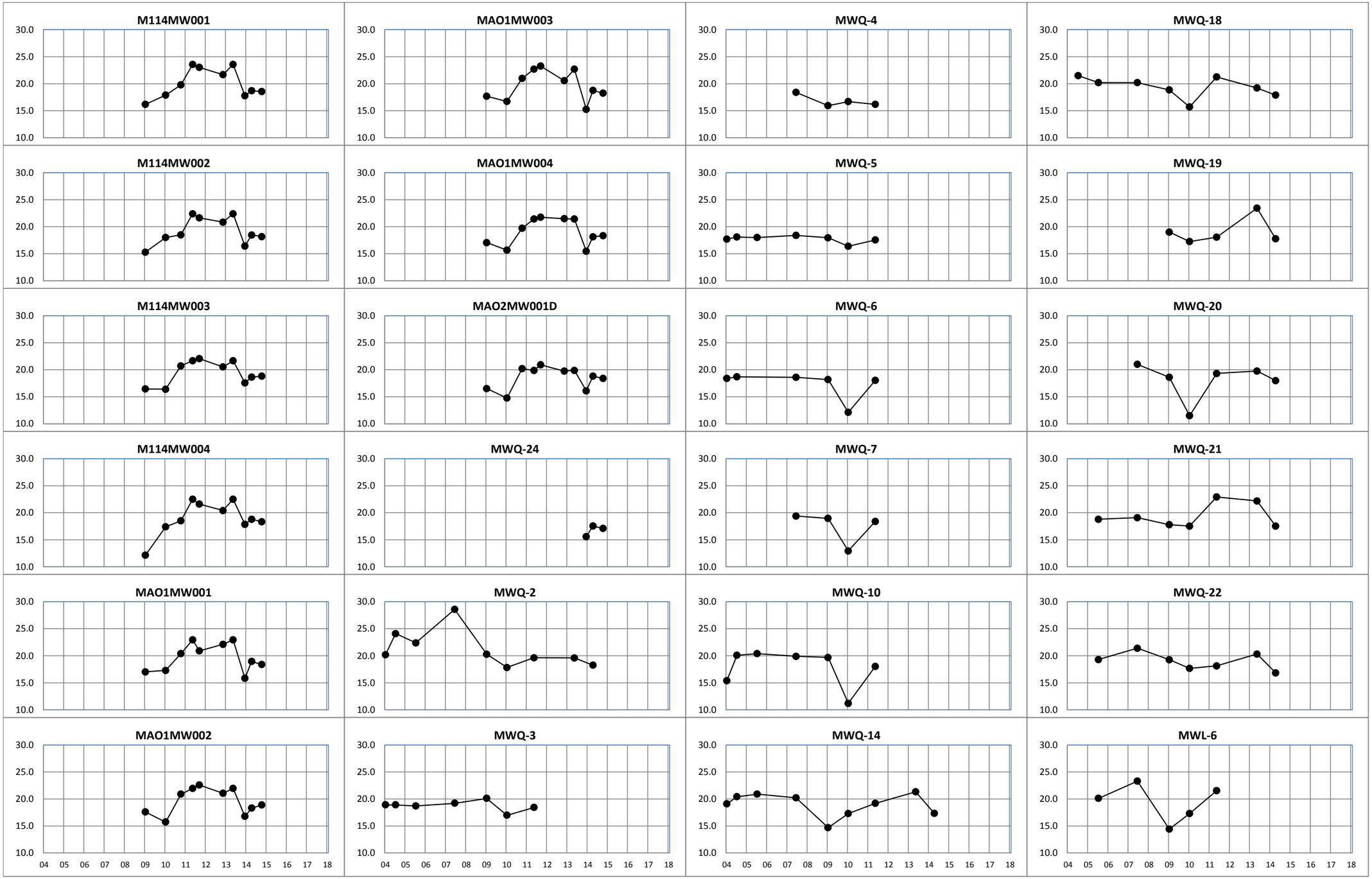
TABLE 4d
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO



Notes:

Data in degrees Celsius

TABLE 4d
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO



Notes:
Data in mS/cm

TABLE 4e
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

DATE	Semiannual Network										
	SWMU 114				SWMU 130				SWMU 131		
	M114MW001	M114MW002	M114MW003	M114MW004	MAO1MW001	MAO1MW002	MAO1MW003	MAO1MW004	MAO2MW001D	MWQ-23	MWQ-24
Jan-04											
Jul-04											
Jul-05											
Jun-07											
Jan-09	5.20	33.00	13.00	5.00	14.00	3.10	8.80	6.00	6.10		
Jan-10	26.20	70.70	55.80	93.60	80.60	165.00	0.00	12.70	53.80		
Oct-10	1.08	10.8	7.11	0.84	3.84	3.76	15.9	6.54	1.97		
May-11	3.4	9.96	14.2	3.03	10.1	1.13	2.21	4.82	4.8	0.99	
Sep-11	5.1	8.06	23.5	8.05	6.02	4.25	1.39	2.22	2.96	2.13	
Nov-12	5.49	8.04	5.29	8.16	4.19	8.06	3.06	4.24	4.01	0.35	
May-13	3.4	9.96	14.2	3.03	10.1	1.13	2.21	4.82	4.8		
Dec-13	1.27	2.23	1.82	1.52	0.49	0.21	0.51	0.91	0.71		2.61
Apr-14	0.1	0.17	0.14	0.29	0.33	0.12	0.22	0.2	0.1		0.37
Oct-14	0.15	0.14	0.42	0.35	0.22	0.8	0.09	0.11	0.21		0.21
Min	0.10	0.14	0.14	0.29	0.22	0.12	0.00	0.11	0.10	0.35	0.21
Max	26.20	70.70	55.80	93.60	80.60	165.00	15.90	12.70	53.80	2.13	2.61
Average	5.14	15.31	13.55	12.39	12.99	18.76	3.44	4.26	7.95	1.16	1.06

Notes:

Data in NTUs

NMED SSL Tapwater Screening Level: N/A

Red indicates exceedance

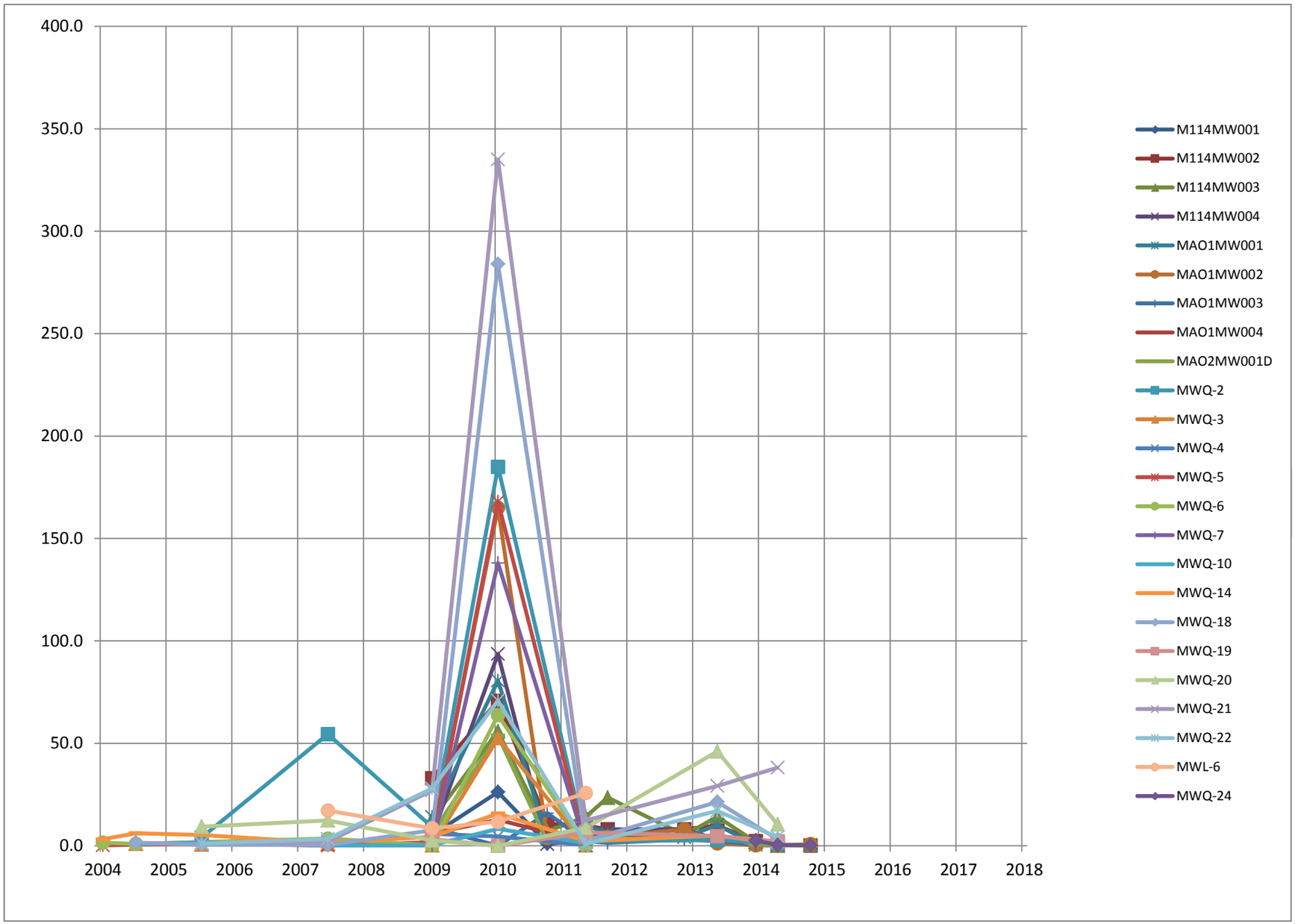
Blank cells indicate no data

Wells MWQ-3, -4, -5, -6, -7, -10, -23, and MWL-6 not sampled after spring 2011

DATE	Annual Network													
						Background	Background							
	MWQ-2	MWQ-3	MWQ-4	MWQ-5	MWQ-6	MWQ-7	MWQ-10	MWQ-14	MWQ-18	MWQ-19	MWQ-20	MWQ-21	MWQ-22	MWL-6
Jan-04				0.20	1.54			3.15						
Jul-04		0.92			0.90		0.79	6.12	1.49					
Jul-05	4.06	0.57		1.21			1.76	5.21	0.52		9.320	1.26	1.07	
Jun-07	54.50	0.79		0.07	3.50	0.35	0.09	1.44	0.39		12.40	1.98	3.29	17.20
Jan-09	9.10	0.25	5.90	1.80	0.18	0.15	0.25	4.40	7.50	3.20	2.60	27.00	28.00	8.50
Jan-10	185.00	52.60	4.50	168.00	63.80	138.00	8.30	15.70	284.00	0.00	0.00	335.00	70.90	11.70
Oct-10														
May-11	2.02	0.17	0.26	0.2	0.27	0.17	1.32	2.29	2.5	6.46	8.71	12.4	0.87	25.7
Sep-11														
Nov-12														
May-13	2.79							5.03	21.4	4.71	46.1	29.2	17.1	
Dec-13														
Apr-14	1.01							0.98	3.11	2.14	10.4	38.1	4.14	
Oct-14														
Min	1.01	0.17	0.26	0.07	0.18	0.15	0.09	0.98	0.39	0.00	0.00	1.26	0.87	8.50
Max	185.00	52.60	5.90	168.00	63.80	138.00	8.30	15.70	284.00	6.46	46.10	335.00	70.90	25.70
Average	36.93	9.22	3.55	28.58	11.70	34.67	2.09	4.92	40.11	3.30	12.79	63.56	17.91	15.78

TABLE 4e
TURBIDITY

TABLE 4e
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

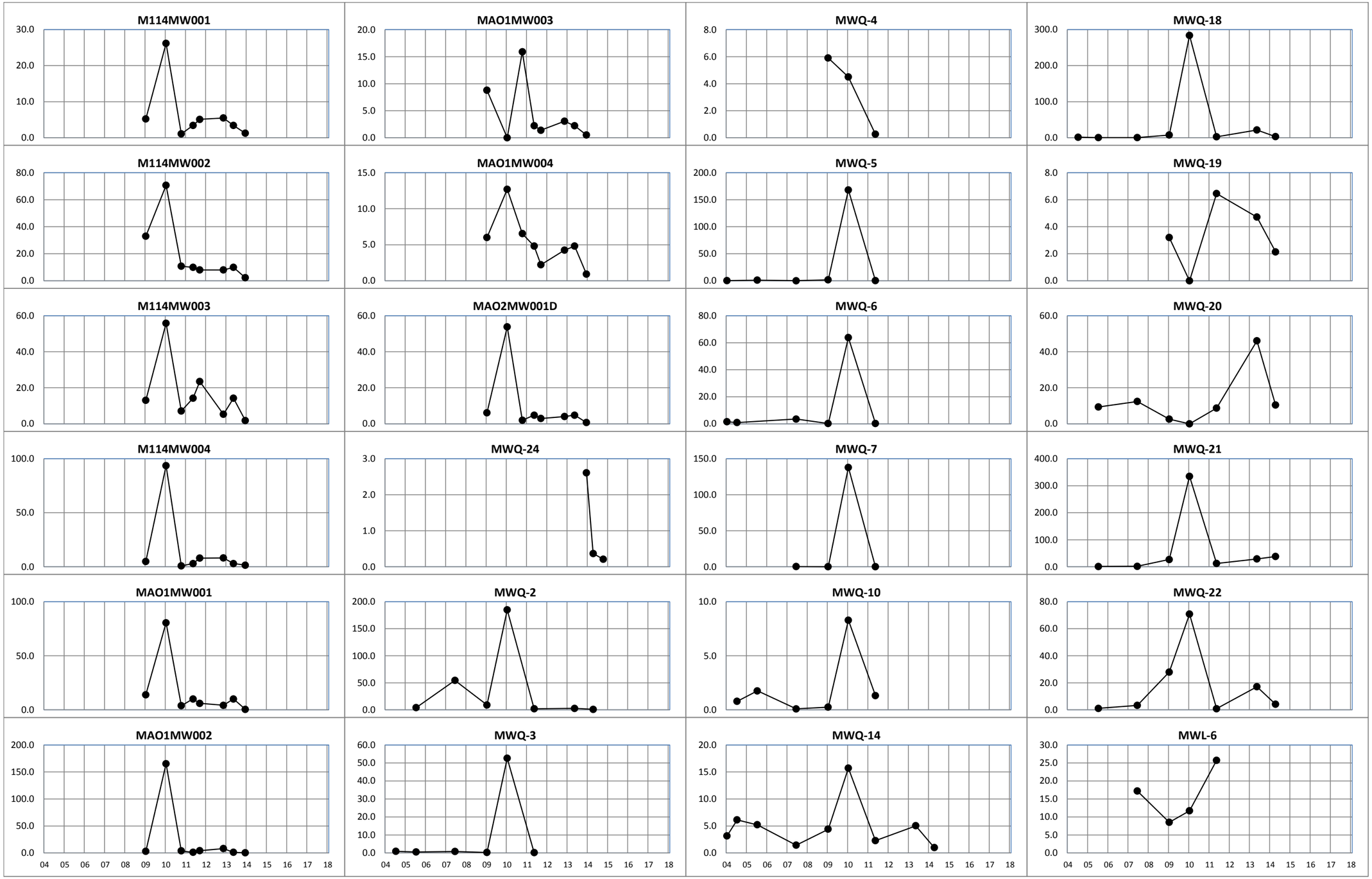


Notes:

Data in NTUs

TABLE 4e
TURBIDITY

TABLE 4e
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO



Notes:

Data in mS/cm

TABLE 4e
TURBIDITY

TABLE 5a
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

				Test Site ID	M114MW001				M114MW002				M114MW003				M114MW004				MA01MW001				MA01MW002			
				Laboratory ID	21404241612				21404241611				21404241609				21404241614				21404241606				21404241601			
				Sample Date	04/24/2014				04/24/2014				04/24/2014				04/25/2014				04/23/2014				04/23/2014			
				Sample Time	14:30				13:08				12:00				09:25				14:16				10:06			
	Parameter	Analytical Method	Unit	NMED SSLs - Tapwater Screening Levels (Dec 2014)	Result	Q	MDL	RL	Result	Q	MDL	RL	Result	Q	MDL	RL	Result	Q	MDL	RL	Result	Q	MDL	RL	Result	Q	MDL	RL
VOCs	Vinyl chloride	8260B	ug/L	0.20	0.127	U	0.127	1	0.127	U	0.127	1	0.127	U	0.127	1	0.127	U	0.127	1	0.127	U	0.127	1	0.127	U	0.127	1
General	Chloride	EPA 300.0	mg/L	NC	3750		50	200	3800		100	400	4080		50	200	3930		100	400	563		25	100	439		25	100
General	Cyanide	EPA 9012B	mg/L	0.00146	0.0005	U	0.0005	0.005	0.0005	U	0.0005	0.005	0.0005	U	0.0005	0.005	0.0005	U	0.0005	0.005	0.0011	J	0.0005	0.005	0.0005	U	0.0005	0.005
General	Perchlorate	SW6860	ug/L	13.82	1.93		0.1	0.3	1.39		0.1	0.3	2.27		0.1	0.3	1.49		0.1	0.3	0.174	J	0.1	0.3	1.42		0.1	0.3
General	Sulfate	EPA 300.0	mg/L	NC	2010		50	200	1980		100	400	2170		50	200	2040		100	400	678		25	100	527		25	100
General	Nitrate	EPA 353.2 Nitrate	mg/L-N	31.59	0.965		0.008	0.01	0.224		0.008	0.01	0.723		0.008	0.01	0.532		0.016	0.02	0.209		0.008	0.01	0.368		0.008	0.01
General	Nitrite	EPA 353.2 Nitrite	mg/L-N	1.97	0.006	U	0.006	0.01	0.006	U	0.006	0.01	0.006	U	0.006	0.01	0.006	U	0.006	0.01	0.006	U	0.006	0.01	0.006	U	0.006	0.01
General	Total Alkalinity	SM 2320 B	mg/L CaCO3	NC	64.8		0.26	1	66.7		0.26	1	56.9		0.26	1	64.5		0.26	1	169		0.26	1	191		0.26	1
General	Total Dissolved Solids(TDS)	SM 2540 C	mg/L	NC	8840		4.39	10	7810		4.39	10	9310		4.39	10	7950		4.39	10	1900		4.39	10	1630		4.39	10
Metals	Aluminum	EPA 6020A	ug/L	19913.93	50	U	50	200	50	U	50	200	50	U	50	200	25	U	25	100	25	U	25	100	25	U	25	100
Metals	Aluminum	EPA 6020A Dissolved	ug/L	19913.93	50	U	50	200	50	U	50	200	50	U	50	200	25	U	25	100	25	U	25	100	270		25	100
Metals	Antimony	EPA 6020A	ug/L	7.26	5	U	5	20	5	U	5	20	5	U	5	20	2.5	U	2.5	10	2.5	U	2.5	10	2.5	U	2.5	10
Metals	Antimony	EPA 6020A Dissolved	ug/L	7.26	5	U	5	20	5	U	5	20	5	U	5	20	2.5	U	2.5	10	2.5	U	2.5	10	2.5	U	2.5	10
Metals	Arsenic	EPA 6020A	ug/L	0.51	2.5	U	2.5	10	2.5	U	2.5	10	2.5	U	2.5	10	1.25	U	1.25	5	1.25	U	1.25	5	1.25	U	1.25	5
Metals	Arsenic	EPA 6020A Dissolved	ug/L	0.51	2.5	U	2.5	10	2.5	U	2.5	10	2.5	U	2.5	10	1.25	U	1.25	5	1.25	U	1.25	5	1.25	U	1.25	5
Metals	Barium	EPA 6020A	ug/L	3277.35	18		2.5	10	15.3		2.5	10	14.9		2.5	10	16.6		1.25	5	14.5		1.25	5	16.7		1.25	5
Metals	Barium	EPA 6020A Dissolved	ug/L	3277.35	18.3		2.5	10	16.3		2.5	10	14.4		2.5	10	16.3		1.25	5	13.5		1.25	5	15.9		1.25	5
Metals	Beryllium	EPA 6020A	ug/L	12.39	2.5	U	2.5	10	2.5	U	2.5	10	2.5	U	2.5	10	1.25	U	1.25	5	1.25	U	1.25	5	1.25	U	1.25	5
Metals	Beryllium	EPA 6020A Dissolved	ug/L	12.39	2.5	U	2.5	10	2.5	U	2.5	10	2.5	U	2.5	10	1.25	U	1.25	5	1.25	U	1.25	5	1.25	U	1.25	5
Metals	Cadmium	EPA 6020A	ug/L	6.24	2.5	U	2.5	10	2.5	U	2.5	10	2.5	U	2.5	10	1.25	U	1.25	5	1.25	U	1.25	5	1.25	U	1.25	5
Metals	Cadmium	EPA 6020A Dissolved	ug/L	6.24	2.5	U	2.5	10	2.5	U	2.5	10	2.5	U	2.5	10	1.25	U	1.25	5	1.25	U	1.25	5	1.25	U	1.25	5
Metals	Calcium	EPA 6020A	ug/L	NC	382000		1250	5000	355000		1250	5000	414000		1250	5000	461000		62500	250000	52700		625	2500	45000		625	2500
Metals	Calcium	EPA 6020A Dissolved	ug/L	NC	401000		1250	5000	340000		1250	5000	425000		1250	5000	439000		62500	250000	50400		625	2500	41900		625	2500
Metals	Chromium	EPA 6020A	ug/L	5.59	2.5	U	2.5	10	2.5	U	2.5	10	2.5	U	2.5	10	1.25	U	1.25	5	1.25	U	1.25	5	1.64	J	1.25	5
Metals	Chromium	EPA 6020A Dissolved	ug/L	5.59	2.5	U	2.5	10	2.5	U	2.5	10	2.5	U	2.5	10	1.25	U	1.25	5	1.25	U	1.25	5	3.19	J	1.25	5
Metals	Chromium, VI	EPA 218.6 LL	ug/L	0.25	0.847		0.014	0.020	0.905		0.014	0.020	0.828		0.014	0.020	0.643		0.014	0.020	0.327		0.014	0.020	1.70		0.056	0.080
Metals	Cobalt	EPA 6020A	ug/L	NC	2.5	U	2.5	10	2.5	U	2.5	10	2.5	U	2.5	10	1.25	U	1.25	5	1.25	U	1.25	5	1.25	U	1.25	5
Metals	Cobalt	EPA 6020A Dissolved	ug/L	NC	2.5	U	2.5	10	2.5	U	2.5	10	2.5	U	2.5	10	1.25	U	1.25	5	1.25	U	1.25	5	1.25	U	1.25	5
Metals	Copper	EPA 6020A	ug/L	789.82	2.5	U	2.5	10	2.5	U	2.5	10	2.5	U	2.5	10	1.25	U	1.25	5	1.25	U	1.25	5	1.25	U	1.25	5
Metals	Copper	EPA 6020A Dissolved	ug/L	789.82	2.5	U	2.5	10	2.5	U	2.5	10	2.5	U	2.5	10	1.25	U	1.25	5	1.35	J	1.25	5	1.25	U	1.25	5
Metals	Iron	EPA 6020A	ug/L	13821.88	250	U	250	1000	250	U	250	1000	250	U	250	1000	125	U	125	500	125	U	125	500	125	U	125	500
Metals	Iron	EPA 6020A Dissolved	ug/L	13821.88	250	U	250	1000	250	U	250	1000	250	U	250	1000	125	U	125	500	125	U	125	500	125	U	125	500
Metals	Lead	EPA 6020A	ug/L	NC	2.5	U	2.5	10	2.5	U	2.5	10	2.5	U	2.5	10	1.25	U	1.25	5	1.25	U	1.25	5	1.25	U	1.25	5
Metals	Lead	EPA 6020A Dissolved	ug/L	NC	2.5	U	2.5	10	2.5	U	2.5	10	2.5	U	2.5	10	1.25	U	1.25	5	1.25	U	1.25	5	1.25	U	1.25	5
Metals	Magnesium	EPA 6020A	ug/L	NC	294000		12500	50000	288000		12500	50000	299000		12500	50000	328000		12500	50000	45100		125	500	37800		125	500
Metals	Magnesium	EPA 6020A Dissolved	ug/L	NC	277000		12500	50000	275000		12500	50000	277000		12500	50000	311000		12500	50000	43100		125	500	34600		125	500
Metals	Manganese	EPA 6020A	ug/L	2017.40	12.5	U	12.5	50	12.5	U	12.5	50	12.5	U	12.5	50	6.25	U	6.25	25	6.25	U	6.25	25	6.25	U	6.25	25
Metals	Manganese	EPA 6020A Dissolved	ug/L	2017.40	12.5	U	12.5	50	12.5	U	12.5	50	12.5	U	12.5	50	6.25	U	6.25	25	6.25	U	6.25	25	7.52	J	6.25	25
Metals	Mercury	EPA 7470A	ug/L	0.63	0.07	UJ	0.07	0.2	0.07	UJ	0.07	0.2	0.07	UJ	0.07	0.2	0.07	U	0.07	0.2	0.07	UJ	0.07	0.2	0.07	UJ	0.07	0.2
Metals	Mercury	EPA 7470A Dissolved	ug/L	0.63	0.07	U	0.07	0.2	0.07	U	0.07	0.2	0.07	U	0.07	0.2	0.07	U	0.07	0.2	0.07	U	0.07	0.2	0.07	U	0.07	0.2
Metals	Molybdenum	EPA 6020A	ug/L	98.73	11		2.5	10	12.9		2.5	10	7.88	J	2.5	10	11.9		1.25	5	5.28		1.25	5	6.78		1.25	5
Metals	Molybdenum	EPA 6020A Dissolved	ug/L	98.73	11.8		2.5	10	14.5		2.5	10	7.79	J	2.5	10	10.9		1.25	5	5.31		1.25	5	6.67		1.25	5
Metals	Nickel	EPA 6020A	ug/L	371.96	5	U	5	20	5	U	5	20	5	U	5	20	2.5	U	2.5	10	2.5	U	2.5	10	2.5	U	2.5	10
Metals	Nickel	EPA 6020A Dissolved	ug/L	371.96	5	U	5	20	5	U	5	20	5	U	5	20	2.5	U	2.5	10	2.5	U	2.5	10	2.5	U	2.5	10
Metals	Potassium	EPA 6020A	ug/L	NC	14700		250	1000	14500		250	1000	14600		250	1000	16300		125	500	6170		125	500	6300		125	500
Metals	Potassium	EPA 6020A Dissolved	ug/L	NC	15100		250	1000	14700		250	1000	14600		250	1000	15300		125	500	6060		125	500	5830		125	500
Metals	Selenium	EPA 6020A	ug/L	98.73	34.1		2.5	10	18		2.5	10	32.8		2.5	10	23.8		1.25	5	5.2		1.25	5	6.29		1.25	5
Metals	Selenium	EPA 6020A Dissolved	ug/L	98.73	30.9		2.5	10	16.9		2.5	10	30		2.5	10	22.5		1.25	5	5.7		1.25	5	5.77		1.25	5
Metals	Silver	EPA 6020A	ug/L	81.19	2.5	U	2.5	10	2.5	U	2.5	10	2.5	U	2.5	10	1.25	U	1.25	5	1.25	U	1.25	5	1.25	U	1.25	5
Metals	Silver	EPA 6020A Dissolved	ug/L	81.19	2.5	UJ	2.5	10	2.5	UJ	2.5	10	2.5	UJ	2.5	10	1.25	U	1.25	5	1.25	U	1.25	5	1.25	U	1.25	5
Metals	Sodium	EPA 6020A	ug/L	NC	2390000		12500	50000	2320000		12500	50000	2710000		12500	50000	2530000		12500	50000	609000		2000	8000	532000		2000	8000
Metals	Sodium	EPA 6020A Dissolved	ug/L	NC	2290000		12500	50000	2230000		12500	50000	2530000		12500	50000	2390000		12500	50000	587000		2000	8000	514000		2000	8000
Metals	Thallium	EPA 6020A	ug/L	0.20	2.5	U	2.5	10	2.5	U	2.5	10	2.5	U	2.5	10	1.25	U	1.25	5	1.25	U	1.25	5	1.25	U	1.25	5
Metals	Thallium	EPA 6020A Dissolved	ug/L	0.20	2.5	U	2.5	10	2.5	U	2.5	10	2.5	U	2.5	10	1.25	U	1.25	5	1.25	U	1.25	5	1.25	U	1.25	5
Metals	Titanium	EPA 6020A	ug/L	NC	2.5	U	2.5	10	2.5	U	2.5	10	2.5	U	2.5	10	1.25	U	1.25	5	1.25	U	1.25	5	1.25	U	1.25	5
Metals	Titanium	EPA 6020A Dissolved	ug/L	NC	2.5	U	2.5	10	2.5	U	2.5	10	2.5	U	2.5	10	1.25	U	1.25	5	1.25	UJ	1.25	5	6.02	J	1.25	5
Metals	Vanadium	EPA 6020A	ug/L	63.07	6.05	J	2.5	10	8.14	J	2.5	10	9.5	J	2.5	10	6.68		1.25	5	10.2		1.25	5	11.7		1.25	5
Metals	Vanadium	EPA 6020A Dissolved	ug/L	63.07	5.76	J	2.5	10	7.1	J	2.5	10	9.04	J	2.5	10	6.2		1.25	5	10		1.25	5	10.5		1.25	5
Metals	Zinc	EPA 6020A	ug/L	5960.45	50	U	50	200	50	U	50	200	50	U	50	200	64.3	J	25	100	25	U	25	100	33.7	J	25	100
Metals	Zinc	EPA 6020A Dissolved	ug/L	5960.45	50	U	50	200	50	U	50	200	50	U	50	200	72.7	J	25	100	25	U	25	100	25	U	25	100

Notes: **Red** indicates exceedance, not necessarily a water quality violation; Greyscale and U qualifier indicates value below detection limit (MDL tabulated); J qualifier indicates estimated result Laboratory: Gulf Coast Analytical Laboratory, Baton Rogue, LA; Sampling performed by Trinity Analysis & Development Corp. ; NC: No Criteria; No explosives detected; Only detected VOCs are tabulated.

TABLE 5a
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

				Test Site ID	MA01MW003				MA01MW004				MA02MW001D				MWQ-2				MWQ-14				MWQ-18			
				Laboratory ID	21404241605				21404241608				21404241617				21404300906				21404300909				21404300902			
				Sample Date	04/23/2014				04/24/2014				04/25/2014				04/30/2014				05/01/2014				04/29/2014			
				Sample Time	13:08				10:10				12:52				10:46				07:51				09:31			
	Parameter	Analytical Method	Unit	NMED SSLs - Tapwater Screening Levels (Dec 2014)	Result	Q	MDL	RL	Result	Q	MDL	RL	Result	Q	MDL	RL	Result	Q	MDL	RL	Result	Q	MDL	RL	Result	Q	MDL	RL
VOCs	Vinyl chloride	8260B	ug/L	0.20	0.127	U	0.127	1	0.127	U	0.127	1	**0.606**	J	0.127	1												
General	Chloride	EPA 300.0	mg/L	NC	529		25	100	270		10	40	2190		50	200	3440		100	400	686		50	200	37.6		2.5	10
	Cyanide	EPA 9012B	mg/L	0.00146	**0.0033**	J	0.0005	0.005	0.0008	J	0.0005	0.005	0.0005	U	0.0005	0.005	**0.004**	J	0.0005	0.005	**0.0029**	J	0.0005	0.005	**0.0022**	J	0.0005	0.005
	Perchlorate	SW6860	ug/L	13.82	0.2	J	0.1	0.3	2.38		0.1	0.3	11.2		0.1	0.3	0.1	U	0.1	0.3	2.80		0.1	0.3	2.83		0.1	0.3
	Sulfate	EPA 300.0	mg/L	NC	591		25	100	345		10	40	2070		50	200	1430		100	400	1030		50	200	116		2.5	10
	Nitrate	EPA 353.2 Nitrate	mg/L-N	31.59	0.15		0.008	0.01	0.504		0.016	0.02	2.24		0.041	0.05	0.157		0.008	0.01	1.29		0.041	0.05	0.298		0.008	0.01
	Nitrite	EPA 353.2 Nitrite	mg/L-N	1.97	0.006	U	0.006	0.01	0.006	U	0.006	0.01	0.006	U	0.006	0.01	0.006	U	0.006	0.01	0.006	U	0.006	0.01	0.006	U	0.006	0.01
	Total Alkalinity	SM 2320 B	mg/L CaCO3	NC	159		0.26	1	196		0.26	1	128		0.26	1	95.9		0.26	1	155		0.26	1	172		0.26	1
	Total Dissolved Solids(TDS)	SM 2540 C	mg/L	NC	1660		4.39	10	888		4.39	10	5730		4.39	10	6500		4.39	10	2720		4.39	10	364		4.39	10
Metals	Aluminum	EPA 6020A	ug/L	19913.93	25	U	25	100	10	U	10	40	25	U	25	100	50	U	50	200	26.6	J	25	100	134		5	20
	Aluminum	EPA 6020A Dissolved	ug/L	19913.93	25	U	25	100	10	U	10	40	25	U	25	100	50	U	50	200	25	U	25	100	13.9	J	5	20
	Antimony	EPA 6020A	ug/L	7.26	2.5	U	2.5	10	1	U	1	4	2.5	U	2.5	10	5	U	5	20	2.5	U	2.5	10	0.5	U	0.5	2
	Antimony	EPA 6020A Dissolved	ug/L	7.26	2.5	U	2.5	10	1	U	1	4	2.5	U	2.5	10	5	U	5	20	2.5	U	2.5	10	0.5	U	0.5	2
	Arsenic	EPA 6020A	ug/L	0.51	1.25	U	1.25	5	**1.21**	J	0.5	2	1.25	U	1.25	5	2.5	U	2.5	10	**1.42**	J	1.25	5	**7.02**		0.25	1
	Arsenic	EPA 6020A Dissolved	ug/L	0.51	1.25	U	1.25	5	**1.22**	J	0.5	2	1.25	U	1.25	5	2.5	U	2.5	10	**1.41**	J	1.25	5	**7.83**		0.25	1
	Barium	EPA 6020A	ug/L	3277.35	14.4		1.25	5	21.8		0.5	2	10.2		1.25	5	27.4		2.5	10	13.4		1.25	5	34.1		0.25	1
	Barium	EPA 6020A Dissolved	ug/L	3277.35	15.1		1.25	5	21		0.5	2	9.89		1.25	5	27.4		2.5	10	11.9		1.25	5	33.5		0.25	1
	Beryllium	EPA 6020A	ug/L	12.39	1.25	U	1.25	5	0.5	U	0.5	2	1.25	U	1.25	5	2.5	U	2.5	10	1.25	U	1.25	5	0.25	U	0.25	1
	Beryllium	EPA 6020A Dissolved	ug/L	12.39	1.25	U	1.25	5	0.5	U	0.5	2	1.25	U	1.25	5	2.5	U	2.5	10	1.25	U	1.25	5	0.25	U	0.25	1
	Cadmium	EPA 6020A	ug/L	6.24	1.25	U	1.25	5	0.5	U	0.5	2	1.25	U	1.25	5	2.5	U	2.5	10	1.25	U	1.25	5	0.25	U	0.25	1
	Cadmium	EPA 6020A Dissolved	ug/L	6.24	1.25	U	1.25	5	0.5	U	0.5	2	1.25	U	1.25	5	2.5	U	2.5	10	1.25	U	1.25	5	0.25	U	0.25	1
	Calcium	EPA 6020A	ug/L	NC	66300		625	2500	42200		250	1000	153000		625	2500	238000		1250	5000	85200		625	2500	46800		125	500
	Calcium	EPA 6020A Dissolved	ug/L	NC	66700		625	2500	42600		250	1000	133000		625	2500	236000		1250	5000	78200		625	2500	47700		125	500
	Chromium	EPA 6020A	ug/L	5.59	1.25	U	1.25	5	0.58	J	0.5	2	1.25	U	1.25	5	2.5	U	2.5	10	1.25	U	1.25	5	0.75	J	0.25	1
	Chromium	EPA 6020A Dissolved	ug/L	5.59	1.25	U	1.25	5	0.69	J	0.5	2	1.25	U	1.25	5	2.5	U	2.5	10	1.25	U	1.25	5	0.65	J	0.25	1
	Chromium, VI	EPA 218.6 LL	ug/L	0.25	**0.371**		0.014	0.020	**0.643**		0.014	0.020	0.020	U	0.014	0.020	0.020	U	0.014	0.020	**0.509**		0.014	0.020	**0.652**		0.014	0.020
	Cobalt	EPA 6020A	ug/L	NC	1.25	U	1.25	5	0.5	U	0.5	2	1.25	U	1.25	5	2.5	U	2.5	10	1.25	U	1.25	5	0.25	U	0.25	1
	Cobalt	EPA 6020A Dissolved	ug/L	NC	1.25	U	1.25	5	0.5	U	0.5	2	1.25	U	1.25	5	2.5	U	2.5	10	1.25	U	1.25	5	0.25	U	0.25	1
	Copper	EPA 6020A	ug/L	789.82	1.25	U	1.25	5	0.51	J	0.5	2	1.64	J	1.25	5	2.5	U	2.5	10	1.25	U	1.25	5	0.68	J	0.25	1
	Copper	EPA 6020A Dissolved	ug/L	789.82	1.25	U	1.25	5	0.69	J	0.5	2	1.99	J	1.25	5	2.5	U	2.5	10	1.25	U	1.25	5	0.45	J	0.25	1
	Iron	EPA 6020A	ug/L	13821.88	125	U	125	500	50	U	50	200	125	U	125	500	250	U	250	1000	125	U	125	500	74.6	J	25	100
	Iron	EPA 6020A Dissolved	ug/L	13821.88	125	U	125	500	50	U	50	200	125	U	125	500	250	U	250	1000	125	U	125	500	25	U	25	100
	Lead	EPA 6020A	ug/L	NC	1.25	U	1.25	5	0.5	U	0.5	2	1.25	U	1.25	5	2.5	U	2.5	10	1.25	U	1.25	5	0.25	U	0.25	1
	Lead	EPA 6020A Dissolved	ug/L	NC	1.25	U	1.25	5	0.5	U	0.5	2	1.25	U	1.25	5	2.5	U	2.5	10	1.25	U	1.25	5	0.25	U	0.25	1
	Magnesium	EPA 6020A	ug/L	NC	61600		2000	8000	37200		1250	5000	65400		12500	50000	132000		12500	50000	70400		2500	10000	19900		250	1000
	Magnesium	EPA 6020A Dissolved	ug/L	NC	62200		2000	8000	34400		1250	5000	57200		12500	50000	134000		12500	50000	65300		2500	10000	20000		250	1000
	Manganese	EPA 6020A	ug/L	2017.40	6.25	U	6.25	25	2.5	U	2.5	10	191		6.25	25	194		12.5	50	6.25	U	6.25	25	2.7	J	1.25	5
	Manganese	EPA 6020A Dissolved	ug/L	2017.40	6.25	U	6.25	25	2.5	U	2.5	10	177		6.25	25	194		12.5	50	6.25	U	6.25	25	1.25	U	1.25	5
	Mercury	EPA 7470A	ug/L	0.63	0.07	UJ	0.07	0.2	0.07	UJ	0.07	0.2	0.07	U	0.07	0.2	0.07	U	0.07	0.2	0.07	U	0.07	0.2	0.07	U	0.07	0.2
	Mercury	EPA 7470A Dissolved	ug/L	0.63	0.07	U	0.07	0.2	0.07	U	0.07	0.2	0.07	U	0.07	0.2	0.07	U	0.07	0.2	0.07	U	0.07	0.2	0.07	U	0.07	0.2
	Molybdenum	EPA 6020A	ug/L	98.73	3.57	J	1.25	5	5.68		0.5	2	20.2		1.25	5	20.5		2.5	10	26.6		1.25	5	4.52		0.25	1
	Molybdenum	EPA 6020A Dissolved	ug/L	98.73	3.55	J	1.25	5	5.73		0.5	2	18.5		1.25	5	19.5		2.5	10	24.1		1.25	5	4.47		0.25	1
	Nickel	EPA 6020A	ug/L	371.96	2.5	U	2.5	10	1	U	1	4	2.5	U	2.5	10	5	U	5	20	15.6		2.5	10	0.5	U	0.5	2
	Nickel	EPA 6020A Dissolved	ug/L	371.96	2.5	U	2.5	10	1	U	1	4	2.5	U	2.5	10	5	U	5	20	14.3		2.5	10	0.5	U	0.5	2
	Potassium	EPA 6020A	ug/L	NC	6970		125	500	5550		50	200	7650		125	500	8560		250	1000	11800		125	500	2700		25	100
	Potassium	EPA 6020A Dissolved	ug/L	NC	7110		125	500	5540		50	200	6900		125	500	8520		250	1000	10800		125	500	2700		25	100
	Selenium	EPA 6020A	ug/L	98.73	5.54		1.25	5	7		0.5	2	36.5		1.25	5	3.39	J	2.5	10	25.1		1.25	5	2.41		0.25	1
	Selenium	EPA 6020A Dissolved	ug/L	98.73	5.74		1.25	5	6.76		0.5	2	35.9		1.25	5	4.22	J	2.5	10	24.1		1.25	5	2.9		0.25	1
	Silver	EPA 6020A	ug/L	81.19	1.25	U	1.25	5	0.5	U	0.5	2	1.25	U	1.25	5	2.5	U	2.5	10	1.25	U	1.25	5	0.25	U	0.25	1
	Silver	EPA 6020A Dissolved	ug/L	81.19	1.25	U	1.25	5	0.5	UJ	0.5	2	1.25	U	1.25	5	2.5	U	2.5	10	1.25	U	1.25	5	0.25	U	0.25	1
	Sodium	EPA 6020A	ug/L	NC	466000		2000	8000	322000		1250	5000	2350000		12500	50000	2190000		12500	50000	784000		2500	10000	65800		250	1000
	Sodium	EPA 6020A Dissolved	ug/L	NC	458000		2000	8000	300000		1250	5000	2060000		12500	50000	2200000		12500	50000	726000		2500	10000	64400		250	1000
	Thallium	EPA 6020A	ug/L	0.20	1.25	U	1.25	5	0.5	U	0.5	2	1.25	U	1.25	5	2.5	U	2.5	10	1.25	U	1.25	5	0.25	U	0.25	1
	Thallium	EPA 6020A Dissolved	ug/L	0.20	1.25	U	1.25	5	0.5	U	0.5	2	1.25	U	1.25	5	2.5	U	2.5	10	1.25	U	1.25	5	0.25	U	0.25	1
	Titanium	EPA 6020A	ug/L	NC	1.25	U	1.25	5	0.5	U	0.5	2	1.25	U	1.25	5	2.5	U	2.5	10	1.25	U	1.25	5	1.56		0.25	1
	Titanium	EPA 6020A Dissolved	ug/L	NC	1.25	UJ	1.25	5	0.5	U	0.5	2	1.25	U	1.25	5	2.5	U	2.5	10	1.25	U	1.25	5	0.32	J	0.25	1
	Vanadium	EPA 6020A	ug/L	63.07	12		1.25	5	18		0.5	2	5.34		1.25	5	2.5	U	2.5	10	6.57		1.25	5	56.3		0.25	1
	Vanadium	EPA 6020A Dissolved	ug/L	63.07	12.2		1.25	5	17.8		0.5	2	4.38	J	1.25	5	2.5	U	2.5	10	5.95		1.25	5	57.7		0.25	1
	Zinc	EPA 6020A	ug/L	5960.45	25	U	25	100	10	U	10	40	25	U	25	100	442		50	200	27.7	J	25	100	9.73	J	5	20
	Zinc	EPA 6020A Dissolved	ug/L	5960.45	25	U	25	100	10	U	10	40	25	U	25	100	440		50	200	26.2	J	25	100	7.15	J	5	20

Notes: **Red** indicates exceedance, not necessarily a water quality violation; Greyscale and U qualifier indicates value below detection limit (MDL tabulated); J qualifier indicates estimated result Laboratory: Gulf Coast Analytical Laboratory, Baton Rogue, LA; Sampling performed by Trinity Analysis & Development Corp. ; NC: No Criteria; No explosives detected; Only detected VOCs are tabulated.

TABLE 5a
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

				Test Site ID	MWQ-19				MWQ-20				MWQ-21				MWQ-22				MWQ-24			
				Laboratory ID	21404300901				21404300910				21404300903				21404300904				21404241615			
				Sample Date	04/29/2014				05/01/2014				04/29/2014				04/30/2014				04/25/2014			
				Sample Time	08:41				10:16				12:41				08:41				11:00			
	Parameter	Analytical Method	Unit	NMED SSLs - Tapwater Screening Levels (Dec 2014)	Result	Q	MDL	RL	Result	Q	MDL	RL	Result	Q	MDL	RL	Result	Q	MDL	RL	Result	Q	MDL	RL
VOCs	Vinyl chloride	8260B	ug/L	0.20																	0.127	U	0.127	1
General	Chloride	EPA 300.0	mg/L	NC	1850		50	200	6260		100	400	113		5	20	388		5	20	5.87		0.5	2
	Cyanide	EPA 9012B	mg/L	0.00146	0.0017	J	0.0005	0.005	0.0032	J	0.0005	0.005	0.0031	J	0.0005	0.005	0.0008	J	0.0005	0.005	0.0005	U	0.0005	0.005
	Perchlorate	SW6860	ug/L	13.82	0.1	U	0.1	0.3	0.1	U	0.1	0.3	5.59		0.1	0.3	0.1	U	0.1	0.3	0.1	U	0.1	0.3
	Sulfate	EPA 300.0	mg/L	NC	1350		50	200	1840		100	400	424		5	20	242		5	20	62.1		0.5	2
	Nitrate	EPA 353.2 Nitrate	mg/L-N	31.59	0.008	U	0.008	0.01	0.03		0.008	0.01	1.47		0.041	0.05	0.008	U	0.008	0.01	1.88		0.041	0.05
	Nitrite	EPA 353.2 Nitrite	mg/L-N	1.97	0.006	J	0.006	0.01	0.022		0.006	0.01	0.006	U	0.006	0.01	0.006	U	0.006	0.01	0.006	U	0.006	0.01
	Total Alkalinity	SM 2320 B	mg/L CaCO3	NC	399		0.26	1	76.3		0.26	1	236		0.26	1	177		0.26	1	218		0.26	1
	Total Dissolved Solids(TDS)	SM 2540 C	mg/L	NC	4070		4.39	10	9870		4.39	10	970		4.39	10	920		4.39	10	270		4.39	10
Metals	Aluminum	EPA 6020A	ug/L	19913.93	44.4	J	25	100	118	J	100	400	1080		5	20	18.3	J	10	40	11	J	5	20
	Aluminum	EPA 6020A Dissolved	ug/L	19913.93	25	U	25	100	100	U	100	400	29.2		5	20	13.6	J	10	40	9.06	J	5	20
	Antimony	EPA 6020A	ug/L	7.26	3.44	J	2.5	10	10	U	10	40	0.5	U	0.5	2	1	U	1	4	0.5	U	0.5	2
	Antimony	EPA 6020A Dissolved	ug/L	7.26	2.5	U	2.5	10	10	U	10	40	0.5	U	0.5	2	1	U	1	4	0.5	U	0.5	2
	Arsenic	EPA 6020A	ug/L	0.51	1.25	U	1.25	5	5	U	5	20	4.93		0.25	1	0.5	U	0.5	2	3.01		0.25	1
	Arsenic	EPA 6020A Dissolved	ug/L	0.51	1.25	U	1.25	5	5	U	5	20	5.86		0.25	1	0.5	U	0.5	2	3.02		0.25	1
	Barium	EPA 6020A	ug/L	3277.35	42.3		1.25	5	28.7		5	20	33.8		0.25	1	36.5		0.5	2	58.2		0.25	1
	Barium	EPA 6020A Dissolved	ug/L	3277.35	32.9		1.25	5	24.2		5	20	28.3		0.25	1	37		0.5	2	56		0.25	1
	Beryllium	EPA 6020A	ug/L	12.39	1.25	U	1.25	5	5	U	5	20	0.25	U	0.25	1	0.5	U	0.5	2	0.25	U	0.25	1
	Beryllium	EPA 6020A Dissolved	ug/L	12.39	1.25	U	1.25	5	5	U	5	20	0.25	U	0.25	1	0.5	U	0.5	2	0.25	U	0.25	1
	Cadmium	EPA 6020A	ug/L	6.24	1.25	U	1.25	5	5	U	5	20	0.25	U	0.25	1	0.5	U	0.5	2	0.25	U	0.25	1
	Cadmium	EPA 6020A Dissolved	ug/L	6.24	1.25	U	1.25	5	5	U	5	20	0.25	U	0.25	1	0.5	U	0.5	2	0.25	U	0.25	1
	Calcium	EPA 6020A	ug/L	NC	346000		31300	125000	752000		2500	10000	95200		6250	25000	51100		250	1000	45600		125	500
	Calcium	EPA 6020A Dissolved	ug/L	NC	351000		31300	125000	683000		2500	10000	110000		6250	25000	50700		250	1000	43700		125	500
	Chromium	EPA 6020A	ug/L	5.59	22.6		1.25	5	5	U	5	20	1.13		0.25	1	0.5	U	0.5	2	0.66	J	0.25	1
	Chromium	EPA 6020A Dissolved	ug/L	5.59	1.25	U	1.25	5	5	U	5	20	0.49	J	0.25	1	0.5	U	0.5	2	0.62	J	0.25	1
	Chromium, VI	EPA 218.6 LL	ug/L	0.25	0.126		0.014	0.020	0.020	U	0.014	0.020	0.479		0.014	0.020	0.028		0.014	0.020	0.604		0.014	0.020
	Cobalt	EPA 6020A	ug/L	NC	1.25	U	1.25	5	5	U	5	20	0.36	J	0.25	1	0.5	U	0.5	2	0.25	U	0.25	1
	Cobalt	EPA 6020A Dissolved	ug/L	NC	1.25	U	1.25	5	5	U	5	20	0.25	U	0.25	1	0.5	U	0.5	2	0.25	U	0.25	1
	Copper	EPA 6020A	ug/L	789.82	1.25	U	1.25	5	5	U	5	20	0.82	J	0.25	1	0.59	J	0.5	2	0.25	U	0.25	1
	Copper	EPA 6020A Dissolved	ug/L	789.82	1.25	U	1.25	5	5	U	5	20	0.43	J	0.25	1	0.5	U	0.5	2	0.28	J	0.25	1
	Iron	EPA 6020A	ug/L	13821.88	1360		125	500	500	U	500	2000	563		25	100	351		50	200	25	U	25	100
	Iron	EPA 6020A Dissolved	ug/L	13821.88	1240		125	500	500	U	500	2000	25	U	25	100	345		50	200	25	U	25	100
	Lead	EPA 6020A	ug/L	NC	120		1.25	5	5	U	5	20	0.87	J	0.25	1	0.5	U	0.5	2	0.25	U	0.25	1
	Lead	EPA 6020A Dissolved	ug/L	NC	1.25	U	1.25	5	5	U	5	20	0.25	U	0.25	1	0.5	U	0.5	2	0.25	U	0.25	1
	Magnesium	EPA 6020A	ug/L	NC	185000		6250	25000	383000		12500	50000	41600		1250	5000	21800		250	1000	22500		250	1000
	Magnesium	EPA 6020A Dissolved	ug/L	NC	186000		6250	25000	348000		12500	50000	48100		1250	5000	20400		250	1000	21700		250	1000
	Manganese	EPA 6020A	ug/L	2017.40	383		6.25	25	975		25	100	15.3		1.25	5	152		2.5	10	1.25	U	1.25	5
	Manganese	EPA 6020A Dissolved	ug/L	2017.40	364		6.25	25	888		25	100	1.25	U	1.25	5	148		2.5	10	1.25	U	1.25	5
	Mercury	EPA 7470A	ug/L	0.63	0.07	U	0.07	0.2	0.07	U	0.07	0.2	0.07	U	0.07	0.2	0.07	U	0.07	0.2	0.07	U	0.07	0.2
	Mercury	EPA 7470A Dissolved	ug/L	0.63	0.07	U	0.07	0.2	0.07	U	0.07	0.2	0.07	U	0.07	0.2	0.07	U	0.07	0.2	0.07	U	0.07	0.2
	Molybdenum	EPA 6020A	ug/L	98.73	4.33	J	1.25	5	13	J	5	20	9.79		0.25	1	13.2		0.5	2	15.1		0.25	1
	Molybdenum	EPA 6020A Dissolved	ug/L	98.73	1.3	J	1.25	5	12.6	J	5	20	11.2		0.25	1	12.8		0.5	2	14		0.25	1
	Nickel	EPA 6020A	ug/L	371.96	2.5	U	2.5	10	10	U	10	40	0.71	J	0.5	2	1	U	1	4	0.5	U	0.5	2
	Nickel	EPA 6020A Dissolved	ug/L	371.96	2.5	U	2.5	10	10	U	10	40	0.5	U	0.5	2	1	U	1	4	0.5	U	0.5	2
	Potassium	EPA 6020A	ug/L	NC	9450		125	500	12800		500	2000	7600		25	100	3130		50	200	4750		25	100
	Potassium	EPA 6020A Dissolved	ug/L	NC	8960		125	500	11500		500	2000	8510		25	100	3080		50	200	4610		25	100
	Selenium	EPA 6020A	ug/L	98.73	2.13	J	1.25	5	5	U	5	20	8.19		0.25	1	0.71	J	0.5	2	0.95	J	0.25	1
	Selenium	EPA 6020A Dissolved	ug/L	98.73	1.62	J	1.25	5	5	U	5	20	10.7		0.25	1	0.84	J	0.5	2	0.8	J	0.25	1
	Silver	EPA 6020A	ug/L	81.19	1.25	U	1.25	5	5	U	5	20	0.25	U	0.25	1	0.5	U	0.5	2	0.25	U	0.25	1
	Silver	EPA 6020A Dissolved	ug/L	81.19	1.25	U	1.25	5	5	U	5	20	0.25	U	0.25	1	0.5	U	0.5	2	0.25	U	0.25	1
	Sodium	EPA 6020A	ug/L	NC	1070000		6250	25000	3440000		12500	50000	143000		1250	5000	338000		1250	5000	52400		250	1000
	Sodium	EPA 6020A Dissolved	ug/L	NC	1070000		6250	25000	3120000		12500	50000	163000		1250	5000	304000		1250	5000	49900		250	1000
	Thallium	EPA 6020A	ug/L	0.20	1.25	U	1.25	5	5	U	5	20	0.25	U	0.25	1	0.5	U	0.5	2	0.25	U	0.25	1
	Thallium	EPA 6020A Dissolved	ug/L	0.20	1.25	U	1.25	5	5	U	5	20	0.25	U	0.25	1	0.5	U	0.5	2	0.25	U	0.25	1
	Titanium	EPA 6020A	ug/L	NC	1.35	J	1.25	5	5	U	5	20	13.4		0.25	1	0.5	U	0.5	2	0.25	U	0.25	1
	Titanium	EPA 6020A Dissolved	ug/L	NC	1.25	U	1.25	5	5	U	5	20	0.64	J	0.25	1	0.5	U	0.5	2	0.25	U	0.25	1
	Vanadium	EPA 6020A	ug/L	63.07	1.25	U	1.25	5	5	U	5	20	42.2		0.25	1	0.5	U	0.5	2	20.9		0.25	1
	Vanadium	EPA 6020A Dissolved	ug/L	63.07	1.25	U	1.25	5	5	U	5	20	46.3		0.25	1	0.5	U	0.5	2	19.7		0.25	1
	Zinc	EPA 6020A	ug/L	5960.45	84.4	J	25	100	518		100	400	79.2		5	20	10	U	10	40	5	U	5	20
	Zinc	EPA 6020A Dissolved	ug/L	5960.45	25	U	25	100	462		100	400	9.65	J	5	20	10	U	10	40	5	U	5	20

Notes: **Red** indicates exceedance, not necessarily a water quality violation; Greyscale and U qualifier indicates value below detection limit (MDL tabulated); J qualifier indicates estimated result Laboratory: Gulf Coast Analytical Laboratory, Baton Rogue, LA; Sampling performed by Trinity Analysis & Development Corp. ; NC: No Criteria; No explosives detected; Only detected VOCs are tabulated.

TABLE 5b
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

				Test Site ID	M114MW001				M114MW002				M114MW003				M114MW004				MA01MW001			
				Laboratory ID	21410220514				21410220509				21410220511				21410220512				21410220503			
				Sample Date	10/22/2014				10/22/2014				10/22/2014				10/22/2014				10/21/2014			
				Sample Time	12:35				9:35				11:10				10:25				12:20			
	Parameter	Analytical Method	Unit	NMED SSLs - Tapwater Screening Levels (Dec 2014)	Result	Q	MDL	RL	Result	Q	MDL	RL	Result	Q	MDL	RL	Result	Q	MDL	RL	Result	Q	MDL	RL
	Acetone	8260B	ug/L	14063.57	0.193	U	0.193	5	0.193	U	0.193	5	0.193	U	0.193	5	0.193	U	0.193	5	0.193	U	0.193	5
General	Chloride	EPA 300.0	mg/L	NC	3100		100	400	2120		50	200	4180		50	200	4010		50	200	523		10	40
	Cyanide	EPA 9012B	mg/L	0.00146	0.0023	J	0.0005	0.005	0.0013	J	0.0005	0.005	0.0005	J	0.0005	0.005	0.0007	J	0.0005	0.005	0.0015	J	0.0005	0.005
	Perchlorate	SW6860	ug/L	13.82	3.01		0.1	0.3	2.29		0.1	0.3	3.38		0.1	0.3	2.33		0.1	0.3	0.308		0.1	0.3
	Sulfate	EPA 300.0	mg/L	NC	1990		100	400	1120		50	200	2240		50	200	2080		50	200	617		10	40
	Nitrate	EPA 353.2 Nitrate	mg/L-N	31.59	1.26		0.016	0.02	0.371		0.008	0.01	1.08		0.016	0.02	0.857		0.008	0.01	0.289		0.008	0.01
	Nitrite	EPA 353.2 Nitrite	mg/L-N	1.97	0.006	U	0.006	0.01	0.006	U	0.006	0.01	0.006	U	0.006	0.01	0.006	U	0.006	0.01	0.006	U	0.006	0.01
	Total Alkalinity	SM 2320 B	mg/L CaCO3	NC	96.2		0.26	1	74.1		0.26	1	76.9		0.26	1	85.5		0.26	1	177		0.26	1
	Total Dissolved Solids(TDS)	SM 2540 C	mg/L	NC	8190		10	10	8680		10	10	9390		10	10	8940		10	10	1890		10	10
Metals	Aluminum	EPA 6020A	ug/L	19913.93	50	U	50	200	100	U	100	400	100	U	100	400	100	U	100	400	25	U	25	100
	Aluminum	EPA 6020A Dissolved	ug/L	19913.93	50	U	50	200	100	U	100	400	100	U	100	400	100	U	100	400	25	U	25	100
	Antimony	EPA 6020A	ug/L	7.26	5	U	5	20	10	U	10	40	10	U	10	40	10	U	10	40	2.5	U	2.5	10
	Antimony	EPA 6020A Dissolved	ug/L	7.26	5	U	5	20	10	U	10	40	10	U	10	40	10	U	10	40	2.5	U	2.5	10
	Arsenic	EPA 6020A	ug/L	0.51	2.5	U	2.5	10	5	U	5	20	5	U	5	20	5	U	5	20	1.25	U	1.25	5
	Arsenic	EPA 6020A Dissolved	ug/L	0.51	2.5	U	2.5	10	5	U	5	20	5	U	5	20	5	U	5	20	1.25	U	1.25	5
	Barium	EPA 6020A	ug/L	3277.35	18.1		2.5	10	15.2	J	5	20	13.6	J	5	20	17.7	J	5	20	12.6		1.25	5
	Barium	EPA 6020A Dissolved	ug/L	3277.35	14.7		2.5	10	14.3	J	5	20	12.9	J	5	20	15.2	J	5	20	11.1		1.25	5
	Beryllium	EPA 6020A	ug/L	12.39	2.5	U	2.5	10	5	U	5	20	5	U	5	20	5	U	5	20	1.25	U	1.25	5
	Beryllium	EPA 6020A Dissolved	ug/L	12.39	2.5	U	2.5	10	5	U	5	20	5	U	5	20	5	U	5	20	1.25	U	1.25	5
	Cadmium	EPA 6020A	ug/L	6.24	2.5	U	2.5	10	5	U	5	20	5	U	5	20	5	U	5	20	1.25	U	1.25	5
	Cadmium	EPA 6020A Dissolved	ug/L	6.24	2.5	U	2.5	10	5	U	5	20	5	U	5	20	5	U	5	20	1.25	U	1.25	5
	Calcium	EPA 6020A	ug/L	NC	317000		1250	5000	346000		2500	10000	413000		2500	10000	402000		2500	10000	52700		625	2500
	Calcium	EPA 6020A Dissolved	ug/L	NC	301000		1250	5000	340000		2500	10000	410000		2500	10000	404000		2500	10000	47600		625	2500
	Chromium	EPA 6020A	ug/L	5.59	3.92	J	2.5	10	5	U	5	20	5	U	5	20	5	U	5	20	1.25	U	1.25	5
	Chromium	EPA 6020A Dissolved	ug/L	5.59	3.98	J	2.5	10	5	U	5	20	5	U	5	20	5	U	5	20	1.25	U	1.25	5
	Chromium, VI	EPA 218.6 LL	ug/L	0.25	4.02		0.14	0.20	1.71		0.14	0.20	0.76		0.14	0.20	1.40		0.14	0.20	0.719		0.014	0.020
	Cobalt	EPA 6020A	ug/L	NC	2.5	U	2.5	10	5	U	5	20	5	U	5	20	5	U	5	20	1.25	U	1.25	5
	Cobalt	EPA 6020A Dissolved	ug/L	NC	2.5	U	2.5	10	5	U	5	20	5	U	5	20	5	U	5	20	1.25	U	1.25	5
	Copper	EPA 6020A	ug/L	789.82	2.5	U	2.5	10	5	U	5	20	5	U	5	20	5	U	5	20	1.25	U	1.25	5
	Copper	EPA 6020A Dissolved	ug/L	789.82	2.5	U	2.5	10	5	U	5	20	5	U	5	20	5	U	5	20	1.25	U	1.25	5
	Iron	EPA 6020A	ug/L	13821.88	250	U	250	1000	500	U	500	2000	500	U	500	2000	500	U	500	2000	125	U	125	500
	Iron	EPA 6020A Dissolved	ug/L	13821.88	250	U	250	1000	500	U	500	2000	3590		500	2000	500	U	500	2000	125	U	125	500
	Lead	EPA 6020A	ug/L	NC	2.5	U	2.5	10	5	U	5	20	5	U	5	20	5	U	5	20	1.25	U	1.25	5
	Lead	EPA 6020A Dissolved	ug/L	NC	2.5	U	2.5	10	5	U	5	20	5	U	5	20	5	U	5	20	1.25	U	1.25	5
	Magnesium	EPA 6020A	ug/L	NC	242000		12500	50000	264000		12500	50000	293000		12500	50000	316000		12500	50000	45800		125	500
	Magnesium	EPA 6020A Dissolved	ug/L	NC	283000		12500	50000	313000		12500	50000	328000		12500	50000	358000		12500	50000	40700		125	500
	Manganese	EPA 6020A	ug/L	2017.40	12.5	U	12.5	50	25	U	25	100	25	U	25	100	25	U	25	100	6.25	U	6.25	25
	Manganese	EPA 6020A Dissolved	ug/L	2017.40	12.5	U	12.5	50	25	U	25	100	25	U	25	100	25	U	25	100	6.25	U	6.25	25
	Mercury	EPA 7470A	ug/L	0.63	0.07	U	0.07	0.2	0.07	U	0.07	0.2	0.07	U	0.07	0.2	0.07	U	0.07	0.2	0.07	U	0.07	0.2
	Mercury	EPA 7470A Dissolved	ug/L	0.63	0.07	U	0.07	0.2	0.07	U	0.07	0.2	0.07	U	0.07	0.2	0.07	U	0.07	0.2	0.07	U	0.07	0.2
	Molybdenum	EPA 6020A	ug/L	98.73	16.1		2.5	10	14.1	J	5	20	7.73	J	5	20	10.5	J	5	20	5.63		1.25	5
	Molybdenum	EPA 6020A Dissolved	ug/L	98.73	15.1		2.5	10	15.7	J	5	20	8.12	J	5	20	11.5	J	5	20	5.44		1.25	5
	Nickel	EPA 6020A	ug/L	371.96	5	U	5	20	10	U	10	40	10	U	10	40	10	U	10	40	2.5	U	2.5	10
	Nickel	EPA 6020A Dissolved	ug/L	371.96	5	U	5	20	10	U	10	40	10	U	10	40	10	U	10	40	2.5	U	2.5	10
	Potassium	EPA 6020A	ug/L	NC	13900		250	1000	14500		500	2000	14700		500	2000	15300		500	2000	6330		125	500
	Potassium	EPA 6020A Dissolved	ug/L	NC	13200		250	1000	14400		500	2000	14800		500	2000	15600		500	2000	5740		125	500
	Selenium	EPA 6020A	ug/L	98.73	29.2		2.5	10	18.7	J	5	20	31.7		5	20	23.6		5	20	4.59	J	1.25	5
	Selenium	EPA 6020A Dissolved	ug/L	98.73	25.8		2.5	10	15	J	5	20	28.7		5	20	21.9		5	20	4.24	J	1.25	5
	Silver	EPA 6020A	ug/L	81.19	2.5	U	2.5	10	5	U	5	20	5	U	5	20	5	U	5	20	1.25	U	1.25	5
	Silver	EPA 6020A Dissolved	ug/L	81.19	2.5	U	2.5	10	5	U	5	20	5	U	5	20	5	U	5	20	1.25	U	1.25	5
	Sodium	EPA 6020A	ug/L	NC	2020000		12500	50000	2130000		12500	50000	2640000		12500	50000	2380000		12500	50000	605000		2500	10000
	Sodium	EPA 6020A Dissolved	ug/L	NC	2350000		12500	50000	2470000		12500	50000	2950000		12500	50000	2620000		12500	50000	534000		2500	10000
	Thallium	EPA 6020A	ug/L	0.20	2.5	U	2.5	10	5	U	5	20	5	U	5	20	5	U	5	20	1.25	U	1.25	5
	Thallium	EPA 6020A Dissolved	ug/L	0.20	2.5	U	2.5	10	5	U	5	20	5	U	5	20	5	U	5	20	1.25	U	1.25	5
	Titanium	EPA 6020A	ug/L	NC	2.5	U	2.5	10	5	U	5	20	5	U	5	20	5	U	5	20	1.25	U	1.25	5
	Titanium	EPA 6020A Dissolved	ug/L	NC	2.5	U	2.5	10	5	U	5	20	5	U	5	20	5	U	5	20	1.25	U	1.25	5
	Vanadium	EPA 6020A	ug/L	63.07	6.5	J	2.5	10	7.27	J	5	20	9.38	J	5	20	5.48	J	5	20	12		1.25	5
	Vanadium	EPA 6020A Dissolved	ug/L	63.07	6.58	J	2.5	10	7.92	J	5	20	9.77	J	5	20	5.78	J	5	20	11		1.25	5
	Zinc	EPA 6020A	ug/L	5960.45	59.7	J	50	200	100	U	100	400	100	U	100	400	100	U	100	400	25	U	25	100
	Zinc	EPA 6020A Dissolved	ug/L	5960.45	55.3	J	50	200	100	U	100	400	100	U	100	400	102	J	100	400	25	U	25	100

Notes: **Red** indicates exceedance, not necessarily a water quality violation; Greyscale and U qualifier indicates value below detection limit (MDL tabulated); J qualifier indicates estimated result Laboratory: Gulf Coast Analytical Laboratory, Baton Rogue, LA; Sampling performed by Trinity Analysis & Development Corp. ; NC: No Criteria; No explosives detected; Only detected VOCs are tabulated.

TABLE 5b
SUMMARY OF FALL 2014 GROUNDWATER CHEMICAL ANALYTICAL DATA

TABLE 5b
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

				Test Site ID	MA01MW002				MA01MW003				MA01MW004				MA02MW001D				MWQ-24			
				Laboratory ID	21410220501				21410220507				21410220504				21410220520				21410220515			
				Sample Date	10/21/2014				10/21/2014				10/21/2014				10/23/2014				10/23/2014			
				Sample Time	10:40				12:26				11:00				11:43				9:32			
	Parameter	Analytical Method	Unit	NMED SSLs - Tapwater Screening Levels (Dec 2014)	Result	Q	MDL	RL	Result	Q	MDL	RL	Result	Q	MDL	RL	Result	Q	MDL	RL	Result	Q	MDL	RL
	Acetone	8260B	ug/L	14063.57	0.193	U	0.193	5	0.193	U	0.193	5	0.193	U	0.193	5	0.193	U	0.193	5	0.193	U	0.193	5
General	Chloride	EPA 300.0	mg/L	NC	443		10	40	477		10	40	255		10	40	2290		50	200	5.39		0.25	1
General	Cyanide	EPA 9012B	mg/L	0.00146	0.0014	J	0.0005	0.005	**0.0025**	J	0.0005	0.005	**0.002**	J	0.0005	0.005	0.0005	U	0.0005	0.005	0.0014	J	0.0005	0.005
General	Perchlorate	SW6860	ug/L	13.82	1.51		0.1	0.3	0.335		0.1	0.3	3.81		0.1	0.3	**14.9**		0.1	0.3	0.135	J	0.1	0.3
General	Sulfate	EPA 300.0	mg/L	NC	534		10	40	549		10	40	333		10	40	2230		50	200	51.7		2.5	10
General	Nitrate	EPA 353.2 Nitrate	mg/L-N	31.59	0.458		0.008	0.01	0.222		0.008	0.01	0.811		0.016	0.02	3.56		0.041	0.05	3.76		0.082	0.1
General	Nitrite	EPA 353.2 Nitrite	mg/L-N	1.97	0.008	J	0.006	0.01	0.006	U	0.006	0.01	0.006	U	0.006	0.01	0.006	U	0.006	0.01	0.006	U	0.006	0.01
General	Total Alkalinity	SM 2320 B	mg/L CaCO3	NC	186		0.26	1	163		0.26	1	196		0.26	1	145		0.26	1	212		0.26	1
General	Total Dissolved Solids(TDS)	SM 2540 C	mg/L	NC	1710		10	10	1790		10	10	1140		10	10	7040		10	10	344		10	10
Metals	Aluminum	EPA 6020A	ug/L	19913.93	26.1	J	25	100	25	U	25	100	10	U	10	40	100	U	100	400	10.3	J	5	20
Metals	Aluminum	EPA 6020A Dissolved	ug/L	19913.93	25	U	25	100	25	U	25	100	10	U	10	40	100	U	100	400	12.7	J	5	20
Metals	Antimony	EPA 6020A	ug/L	7.26	2.5	U	2.5	10	2.5	U	2.5	10	1	U	1	4	10	U	10	40	0.5	U	0.5	2
Metals	Antimony	EPA 6020A Dissolved	ug/L	7.26	2.5	U	2.5	10	2.5	U	2.5	10	1	U	1	4	10	U	10	40	0.5	U	0.5	2
Metals	Arsenic	EPA 6020A	ug/L	0.51	1.25	U	1.25	5	1.25	U	1.25	5	**1.39**	J	0.5	2	5	U	5	20	**4.77**		0.25	1
Metals	Arsenic	EPA 6020A Dissolved	ug/L	0.51	1.25	U	1.25	5	1.25	U	1.25	5	**1.4**	J	0.5	2	5	U	5	20	**4.92**		0.25	1
Metals	Barium	EPA 6020A	ug/L	3277.35	14		1.25	5	15		1.25	5	19.9		0.5	2	7.67	J	5	20	54.8		0.25	1
Metals	Barium	EPA 6020A Dissolved	ug/L	3277.35	14.1		1.25	5	14.7		1.25	5	20.3		0.5	2	8.94	J	5	20	60.7		0.25	1
Metals	Beryllium	EPA 6020A	ug/L	12.39	1.25	U	1.25	5	1.25	U	1.25	5	0.5	U	0.5	2	5	U	5	20	0.25	U	0.25	1
Metals	Beryllium	EPA 6020A Dissolved	ug/L	12.39	1.25	U	1.25	5	1.25	U	1.25	5	0.5	U	0.5	2	5	U	5	20	0.25	U	0.25	1
Metals	Cadmium	EPA 6020A	ug/L	6.24	1.25	U	1.25	5	1.25	U	1.25	5	0.5	U	0.5	2	5	U	5	20	0.25	U	0.25	1
Metals	Cadmium	EPA 6020A Dissolved	ug/L	6.24	1.25	U	1.25	5	1.25	U	1.25	5	0.5	U	0.5	2	5	U	5	20	0.25	U	0.25	1
Metals	Calcium	EPA 6020A	ug/L	NC	44400		625	2500	69800		625	2500	40800		250	1000	132000		2500	10000	43600		125	500
Metals	Calcium	EPA 6020A Dissolved	ug/L	NC	44400		625	2500	67200		625	2500	41400		250	1000	141000		2500	10000	47800		125	500
Metals	Chromium	EPA 6020A	ug/L	5.59	1.7	J	1.25	5	1.25	U	1.25	5	0.79	J	0.5	2	5	U	5	20	0.57	J	0.25	1
Metals	Chromium	EPA 6020A Dissolved	ug/L	5.59	1.45	J	1.25	5	1.25	U	1.25	5	0.66	J	0.5	2	5	U	5	20	0.58	J	0.25	1
Metals	Chromium, VI	EPA 218.6 LL	ug/L	0.25	**1.48**		0.028	0.040	**0.417**		0.014	0.020	**0.719**		0.014	0.020	0.020	U	0.014	0.020	**0.560**		0.014	0.020
Metals	Cobalt	EPA 6020A	ug/L	NC	1.25	U	1.25	5	1.25	U	1.25	5	0.5	U	0.5	2	5	U	5	20	0.25	U	0.25	1
Metals	Cobalt	EPA 6020A Dissolved	ug/L	NC	1.25	U	1.25	5	1.25	U	1.25	5	0.5	U	0.5	2	5	U	5	20	0.25	U	0.25	1
Metals	Copper	EPA 6020A	ug/L	789.82	1.25	U	1.25	5	1.37	J	1.25	5	1.45	J	0.5	2	5	U	5	20	0.25	U	0.25	1
Metals	Copper	EPA 6020A Dissolved	ug/L	789.82	1.25	U	1.25	5	1.25	U	1.25	5	1.78	J	0.5	2	5	U	5	20	0.25	U	0.25	1
Metals	Iron	EPA 6020A	ug/L	13821.88	125	U	125	500	125	U	125	500	50	U	50	200	500	U	500	2000	25	U	25	100
Metals	Iron	EPA 6020A Dissolved	ug/L	13821.88	125	U	125	500	125	U	125	500	50	U	50	200	500	U	500	2000	25	U	25	100
Metals	Lead	EPA 6020A	ug/L	NC	1.25	U	1.25	5	1.25	U	1.25	5	0.5	U	0.5	2	5	U	5	20	0.25	U	0.25	1
Metals	Lead	EPA 6020A Dissolved	ug/L	NC	1.25	U	1.25	5	1.25	U	1.25	5	0.5	U	0.5	2	5	U	5	20	0.25	U	0.25	1
Metals	Magnesium	EPA 6020A	ug/L	NC	37400		125	500	64100		2500	10000	35300		2500	10000	50000		500	2000	21000		250	1000
Metals	Magnesium	EPA 6020A Dissolved	ug/L	NC	36800		125	500	62300		2500	10000	34800		2500	10000	55300		500	2000	23600		250	1000
Metals	Manganese	EPA 6020A	ug/L	2017.40	6.25	U	6.25	25	6.25	U	6.25	25	2.5	U	2.5	10	180		25	100	1.25	U	1.25	5
Metals	Manganese	EPA 6020A Dissolved	ug/L	2017.40	6.25	U	6.25	25	6.25	U	6.25	25	2.5	U	2.5	10	190		25	100	1.25	U	1.25	5
Metals	Mercury	EPA 7470A	ug/L	0.63	0.07	U	0.07	0.2	0.07	U	0.07	0.2	0.07	U	0.07	0.2	0.14399	J	0.07	0.2	0.07	U	0.07	0.2
Metals	Mercury	EPA 7470A Dissolved	ug/L	0.63	0.07	U	0.07	0.2	0.07	U	0.07	0.2	0.07	U	0.07	0.2	0.07	U	0.07	0.2	0.07	U	0.07	0.2
Metals	Molybdenum	EPA 6020A	ug/L	98.73	6.4		1.25	5	3.93	J	1.25	5	5.59		0.5	2	16.8	J	5	20	9.5		0.25	1
Metals	Molybdenum	EPA 6020A Dissolved	ug/L	98.73	6.67		1.25	5	3.98	J	1.25	5	5.52		0.5	2	18.7	J	5	20	9.93		0.25	1
Metals	Nickel	EPA 6020A	ug/L	371.96	2.5	U	2.5	10	2.5	U	2.5	10	1	U	1	4	10	U	10	40	0.5	U	0.5	2
Metals	Nickel	EPA 6020A Dissolved	ug/L	371.96	2.5	U	2.5	10	2.5	U	2.5	10	1	U	1	4	10	U	10	40	0.5	U	0.5	2
Metals	Potassium	EPA 6020A	ug/L	NC	5960		125	500	7180		125	500	5530		50	200	6260		500	2000	3930		25	100
Metals	Potassium	EPA 6020A Dissolved	ug/L	NC	6020		125	500	6960		125	500	5740		50	200	7170		500	2000	4420		25	100
Metals	Selenium	EPA 6020A	ug/L	98.73	4.79	J	1.25	5	4.4	J	1.25	5	6.35		0.5	2	33.7		5	20	0.58	J	0.25	1
Metals	Selenium	EPA 6020A Dissolved	ug/L	98.73	4.61	J	1.25	5	3.79	J	1.25	5	6.81		0.5	2	42		5	20	0.65	J	0.25	1
Metals	Silver	EPA 6020A	ug/L	81.19	1.25	U	1.25	5	1.25	U	1.25	5	0.5	U	0.5	2	5	U	5	20	0.25	U	0.25	1
Metals	Silver	EPA 6020A Dissolved	ug/L	81.19	1.25	U	1.25	5	1.25	U	1.25	5	0.5	U	0.5	2	5	U	5	20	0.25	U	0.25	1
Metals	Sodium	EPA 6020A	ug/L	NC	503000		2500	10000	466000		2500	10000	305000		2500	10000	2030000		12500	50000	33000		250	1000
Metals	Sodium	EPA 6020A Dissolved	ug/L	NC	490000		2500	10000	449000		2500	10000	306000		2500	10000	2110000		12500	50000	37000		250	1000
Metals	Thallium	EPA 6020A	ug/L	0.20	1.25	U	1.25	5	1.25	U	1.25	5	0.5	U	0.5	2	5	U	5	20	0.25	U	0.25	1
Metals	Thallium	EPA 6020A Dissolved	ug/L	0.20	1.25	U	1.25	5	1.25	U	1.25	5	0.5	U	0.5	2	5	U	5	20	0.25	U	0.25	1
Metals	Titanium	EPA 6020A	ug/L	NC	1.25	U	1.25	5	1.25	U	1.25	5	0.5	U	0.5	2	5	U	5	20	0.25	U	0.25	1
Metals	Titanium	EPA 6020A Dissolved	ug/L	NC	1.25	U	1.25	5	1.25	U	1.25	5	0.5	U	0.5	2	5	U	5	20	0.25	U	0.25	1
Metals	Vanadium	EPA 6020A	ug/L	63.07	11.5		1.25	5	13.5		1.25	5	18		0.5	2	5	U	5	20	33.4		0.25	1
Metals	Vanadium	EPA 6020A Dissolved	ug/L	63.07	11.5		1.25	5	12.9		1.25	5	17.7		0.5	2	5	U	5	20	34.6		0.25	1
Metals	Zinc	EPA 6020A	ug/L	5960.45	25	U	25	100	26.3	J	25	100	11.7	J	10	40	100	U	100	400	5	U	5	20
Metals	Zinc	EPA 6020A Dissolved	ug/L	5960.45	25	U	25	100	25	U	25	100	10.9	J	10	40	100	U	100	400	5	U	5	20

Notes: **Red** indicates exceedance, not necessarily a water quality violation; Greyscale and U qualifier indicates value below detection limit (MDL tabulated); J qualifier indicates estimated result Laboratory: Gulf Coast Analytical Laboratory, Baton Rogue, LA; Sampling performed by Trinity Analysis & Development Corp. ; NC: No Criteria; No explosives detected; Only detected VOCs are tabulated.

TABLE 5b
SUMMARY OF FALL 2014 GROUNDWATER CHEMICAL ANALYTICAL DATA

TABLE 6a
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

DATE	Semiannual Network																			
	SWMU 114								SWMU 130								SWMU 131			
	M114MW001		M114MW002		M114MW003		M114MW004		MAO1MW001		MAO1MW002		MAO1MW003		MAO1MW004		MAO2MW001D		MWQ-24	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04																				
Jul-04																				
Jul-05																				
Jun-07																				
Jan-09																				
Jan-10	<D.L.	<D.L.	280	<D.L.	180	<D.L.	<D.L.	<D.L.	410	<D.L.	820	<D.L.	350	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
Oct-10	<D.L.	<D.L.	359	<D.L.	<D.L.	<D.L.	45.3	46.7	128	85.2	69.8	<D.L.	334	<D.L.	283	100	<D.L.	<D.L.		
May-11	<D.L.	77.6	78.8	<D.L.	63.6	67.3	<D.L.	<D.L.	276	105	<D.L.	164	111	<D.L.	<D.L.	<D.L.	79.6	<D.L.		
Sep-11	100	<D.L.	85.3	<D.L.	200	<D.L.	110	<D.L.	84.3	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
Nov-12	446	<D.L.	231.0	<D.L.	2790	<D.L.	106	<D.L.	502.0	<D.L.	437.0	<D.L.	81.6	<D.L.	279.0	<D.L.	68.2	<D.L.		
May-13	75.8	<D.L.	86.6	<D.L.	93.9	<D.L.	106	<D.L.	319.0	<D.L.	187.0	114.0	205.0	88.4	98.5	78.9	72.1	<D.L.		
Dec-13	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	30.8	13.8
Apr-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	11	9.06
Oct-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	26.1	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	10.3	12.7
Min	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.3	9.1
Max	446.0	77.6	359.0	0.0	2790.0	67.3	110.0	46.7	502.0	105.0	820.0	164.0	350.0	88.4	283.0	100.0	79.6	0.0	30.8	13.8
Avg	69.1	8.6	124.5	0.0	369.7	7.5	40.8	5.2	191.0	21.1	171.1	30.9	120.2	9.8	73.4	19.9	24.4	0.0	17.4	11.9

DATE	Annual Network													
	MWQ-2		MWQ-14		MWQ-18		MWQ-19		MWQ-20		MWQ-21		MWQ-22	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04														
Jul-04														
Jul-05														
Jun-07		<D.L.		<D.L.										
Jan-09														
Jan-10	75	<D.L.	<D.L.	<D.L.	3200	<D.L.	64	<D.L.	38	<D.L.	2500	<D.L.	560	<D.L.
Oct-10														
May-11	<D.L.	<D.L.	60.6	<D.L.	153	<D.L.	72.4	<D.L.	261	<D.L.	1100	272	<D.L.	<D.L.
Sep-11														
Nov-12														
May-13	121.0	<D.L.	144.0	<D.L.	626.0	131.0	91.1	<D.L.	2230.0	97.0	1700.0	<D.L.	1260.0	<D.L.
Dec-13														
Apr-14	<D.L.	<D.L.	26.6	<D.L.	134	13.9	44.4	<D.L.	118	<D.L.	1080	29.2	18.3	13.6
Oct-14														
Min	0.0	0.0	0.0	0.0	134.0	0.0	44.4	0.0	38.0	0.0	1080.0	0.0	0.0	0.0
Max	121.0	0.0	144.0	0.0	3200.0	131.0	91.1	0.0	2230.0	97.0	2500.0	272.0	1260.0	13.6
Avg	49.0	0.0	57.8	0.0	1028.3	36.2	68.0	0.0	661.8	24.3	1595.0	75.3	459.6	3.4

Notes:

Data in µg/L

NMED SSL Tapwater Screening Level: 19913.93 µg/L

Red indicates exceedance

Blank cells indicate no data

Wells MWQ-3, -4, -5, -6, -7, -10, -23, and MWL-6 not sampled after spring 2011

TABLE 6a
ALUMINUM

TABLE 6a
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

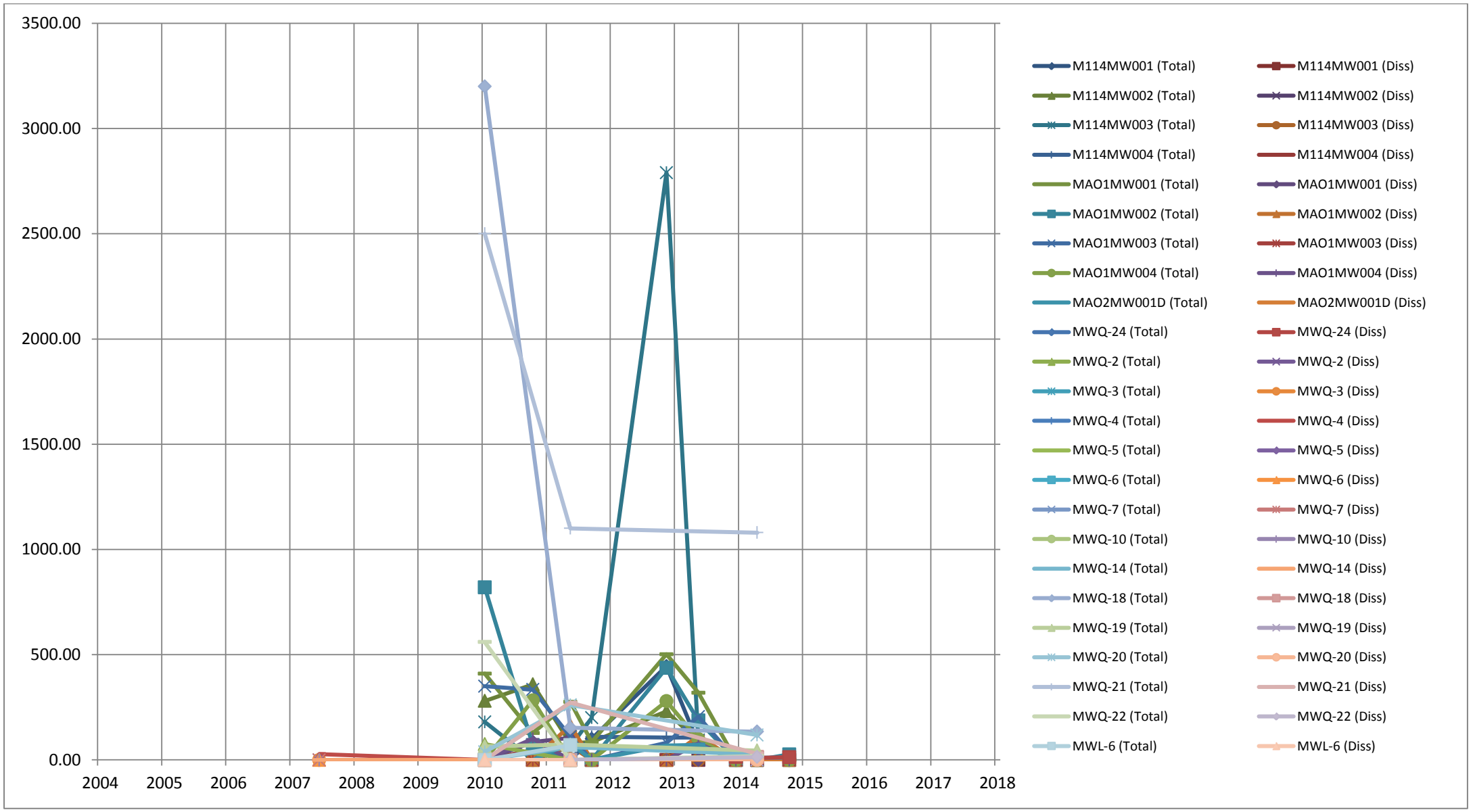


TABLE 6a
ALUMINUM

TABLE 6a
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

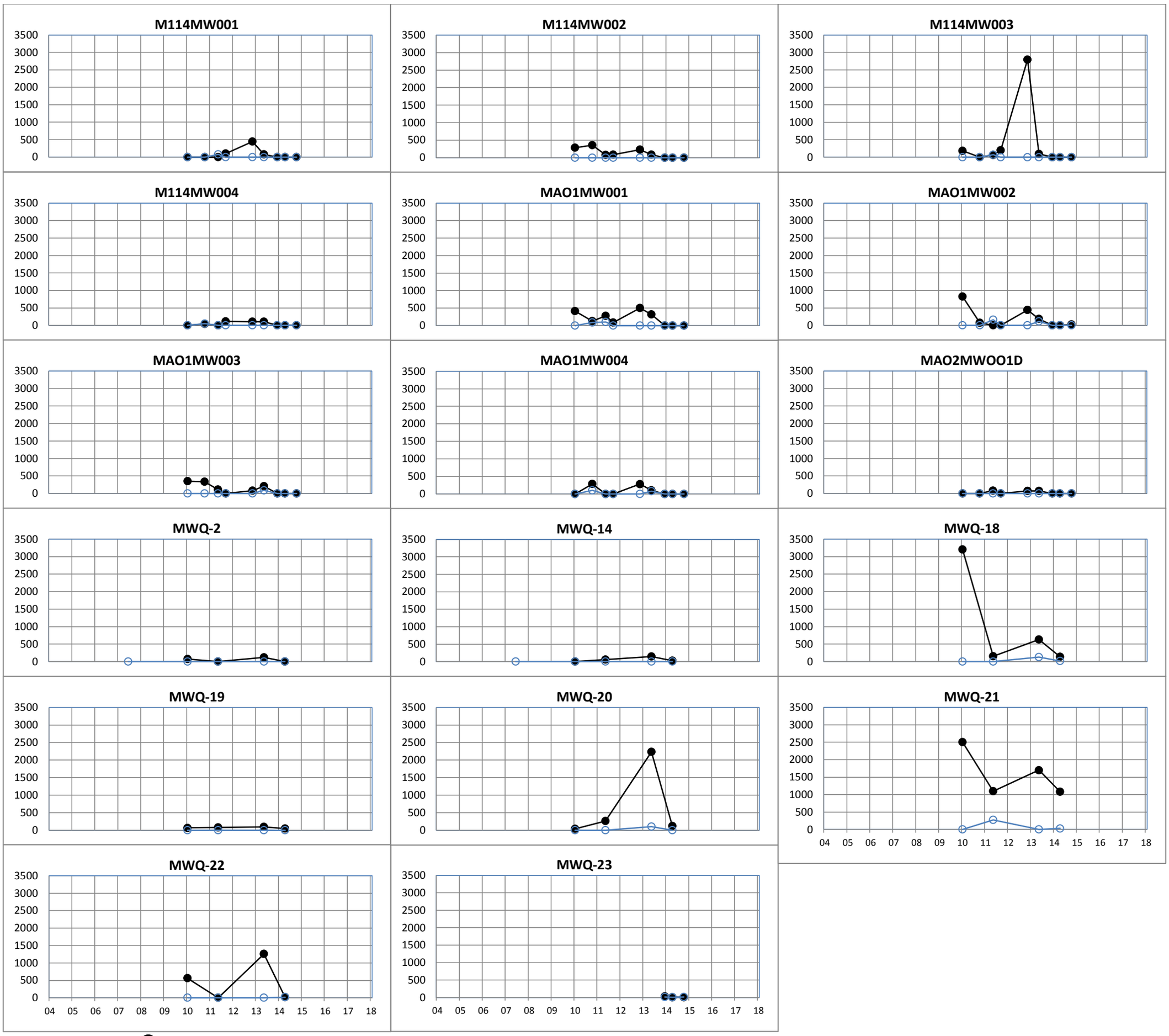


TABLE 6a
ALUMINUM

TABLE 6b
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

DATE	Semiannual Network																			
	SWMU 114								SWMU 130								SWMU 131			
	M114MW001		M114MW002		M114MW003		M114MW004		MAO1MW001		MAO1MW002		MAO1MW003		MAO1MW004		MAO2MW001D		MWQ-24	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	MWQ-24	Diss
Jan-04																				
Jul-04																				
Jul-05																				
Jun-07																				
Jan-09		0.59		<D.L.		<D.L.		0.65		0.16		<D.L.		<D.L.		<D.L.		0.89		
Jan-10	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
Oct-10	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	6.82	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
May-11	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	4.59	<D.L.	<D.L.	**102**	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
Sep-11	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	5.29	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
Nov-12	6.43	<D.L.	4.27	<D.L.	<D.L.	4.85	<D.L.	5.71	<D.L.	<D.L.	3.66	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	4.69	4.38		
May-13	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
Dec-13	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Apr-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Oct-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Min	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Max	6.4	0.6	4.3	0.0	0.0	4.9	6.8	5.7	0.0	0.2	102.0	0.0	5.3	0.0	0.0	0.0	4.7	4.4	0.0	0.0
Avg	0.7	0.1	0.5	0.0	0.0	0.5	0.8	1.1	0.0	0.0	11.7	0.0	0.6	0.0	0.0	0.0	0.5	0.5	0.0	0.0

DATE	Annual Network													
	MWQ-2		MWQ-14		MWQ-18		MWQ-19		MWQ-20		MWQ-21		MWQ-22	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04		1.9		0.26										
Jul-04		<D.L.		<D.L.		<D.L.								
Jul-05		<D.L.		0.36		0.082				0.360		0.11		0.048
Jun-07		0.22		0.11		0.071				0.500		0.099		0.23
Jan-09		2.00		<D.L.		<D.L.		<D.L.		0.63		0.88		1.00
Jan-10	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Oct-10														
May-11	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	**20.3**	6	<D.L.	<D.L.	<D.L.	<D.L.
Sep-11														
Nov-12														
May-13	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Dec-13														
Apr-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	3.44	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Oct-14														
Min	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max	0.0	2.0	0.0	0.4	0.0	0.1	3.4	0.0	20.3	6.0	0.0	0.9	0.0	1.0
Avg	0.0	0.5	0.0	0.1	0.0	0.0	0.9	0.0	5.1	1.1	0.0	0.2	0.0	0.2

Notes:

Data in µg/L

NMED SSL Tapwater Screening Level: 7.26 µg/L

Red indicates exceedance

Blank cells indicate no data

Wells MWQ-3, -4, -5, -6, -7, -10, -23, and MWL-6 not sampled after spring 2011

Due to a preponderance of no detects trends are not plotted

TABLE 6b
ANTIMONY

TABLE 6c
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

DATE	Semiannual Network																			
	SWMU 114								SWMU 130								SWMU 131			
	M114MW001		M114MW002		M114MW003		M114MW004		MAO1MW001		MAO1MW002		MAO1MW003		MAO1MW004		MAO2MW001D		MWQ-24	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04																				
Jul-04																				
Jul-05																				
Jun-07																				
Jan-09		**4.4**		**5.1**		**6.5**		**0.55**		**0.96**		**1.6**		**2.5**		**2.6**		**10.2**		
Jan-10	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
Oct-10	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
May-11	<D.L.	**2.74**	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	**4.01**	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	**5.99**		
Sep-11	<D.L.	**3.83**	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	**4.75**	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
Nov-12	<D.L.	**3.97**	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
May-13	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
Dec-13	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	**3.96**	**4.01**
Apr-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	**1.21**	**1.22**	<D.L.	<D.L.	**3.01**	**3.02**
Oct-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	**1.39**	**1.40**	<D.L.	<D.L.	**4.77**	**4.92**
Min	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0
Max	0.0	4.4	0.0	5.1	0.0	6.5	0.0	4.8	0.0	1.0	0.0	1.6	0.0	2.5	1.4	2.6	0.0	10.2	4.8	4.9
Avg	0.0	1.5	0.0	0.5	0.0	0.7	0.0	0.9	0.0	0.1	0.0	0.2	0.0	0.3	0.3	0.5	0.0	1.6	3.9	4.0

DATE	Annual Network													
	MWQ-2		MWQ-14		MWQ-18		MWQ-19		MWQ-20		MWQ-21		MWQ-22	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04		**4.10**		**4.80**										
Jul-04		**4.7**		**4.1**		**7.2**								
Jul-05		**7.6**		**5.5**		**7.4**				**6.0**		**7.2**		**2.4**
Jun-07		**4.3**		**4.4**		**6.9**				**2.0**		**5.8**		**2.0**
Jan-09		**0.87**		**5.2**		**8.5**		**5.3**		**5.1**		**6.6**		**1.1**
Jan-10	<D.L.	<D.L.	<D.L.	<D.L.	**9.4**	**4.7**	**6.3**	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Oct-10														
May-11	<D.L.	**3**	<D.L.	**3.99**	**6.33**	**7.34**	<D.L.	**3.75**	<D.L.	**3.95**	**6.1**	**9.41**	<D.L.	<D.L.
Sep-11														
Nov-12														
May-13	<D.L.	<D.L.	<D.L.	<D.L.	**5.80**	**5.31**	**5.19**	<D.L.	<D.L.	**5.57**	<D.L.	<D.L.	<D.L.	<D.L.
Dec-13														
Apr-14	<D.L.	<D.L.	**1.42**	**1.41**	**7.02**	**7.83**	<D.L.	<D.L.	<D.L.	<D.L.	**4.93**	**5.86**	<D.L.	<D.L.
Oct-14														
Min	0.0	0.0	0.0	0.0	5.8	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max	0.0	7.6	1.4	5.5	9.4	8.5	6.3	5.3	0.0	6.0	6.1	9.4	0.0	2.4
Avg	0.0	2.7	0.4	3.3	7.1	6.9	2.9	1.8	0.0	3.2	2.8	5.0	0.0	0.8

Notes:

Data in µg/L

NMED SSL Tapwater Screening Level: 0.51 µg/L

Red indicates exceedance

Blank cells indicate no data

Wells MWQ-3, -4, -5, -6, -7, -10, -23, and MWL-6 not sampled after spring 2011

TABLE 6c
ARSENIC

TABLE 6c
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

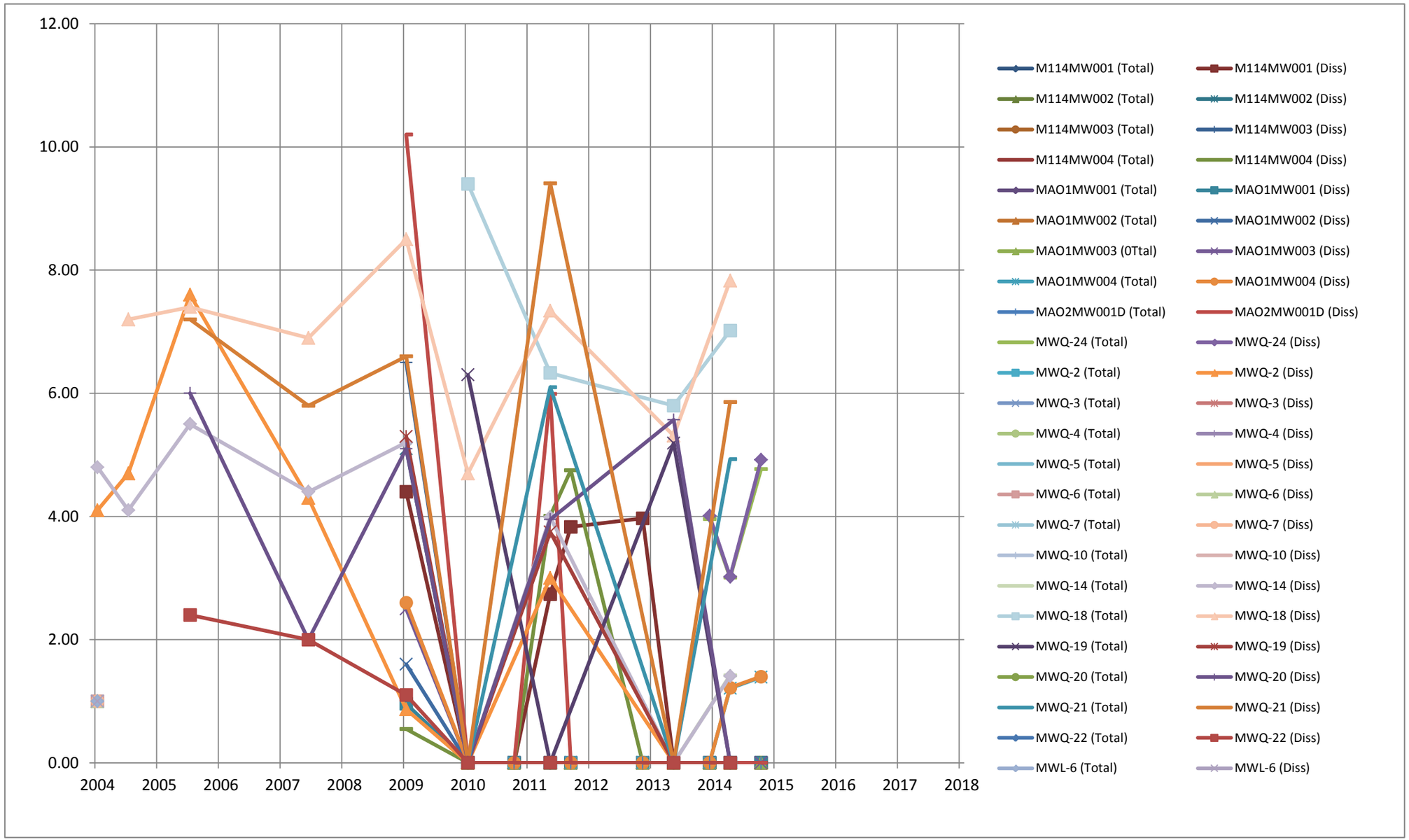
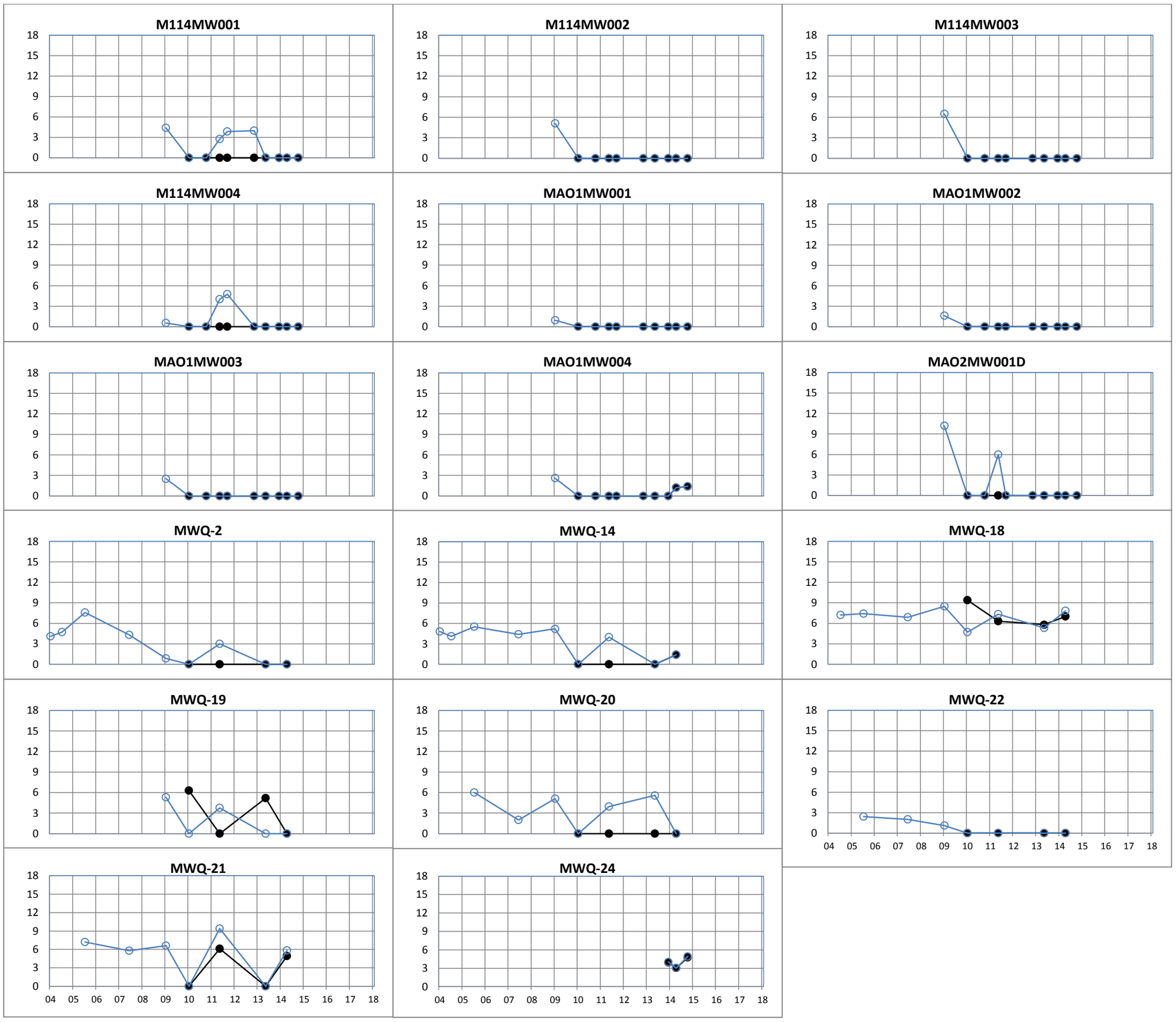


TABLE 6c
ARSENIC

TABLE 6c
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO



Notes:

Data in µg/L

Total Concentration

Dissolved Concentration

TABLE 6c
ARSENIC

TABLE 6d
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

DATE	Semiannual Network																			
	SWMU 114								SWMU 130								SWMU 131			
	M114MW001		M114MW002		M114MW003		M114MW004		MAO1MW001		MAO1MW002		MAO1MW003		MAO1MW004		MAO2MW001D		MWQ-24	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04																				
Jul-04																				
Jul-05																				
Jun-07																				
Jan-09		17.5		14.3		15.3		13.7		16.9		19.0		16.3		23.2		10.3		
Jan-10	18	18	18	17	15	15	19	18	21	14	27	14	25	18	21	21	9.8	8.8		
Oct-10	9.01	9.58	13.9	10.6	4.82	4.49	6.49	6.58	15.8	15.2	13	12	24.3	18.9	23.5	21.1	7.06	6.97		
May-11	23.7	18.7	23.9	17.5	20.9	14.6	23.8	17.8	27.8	18.0	17.6	16.5	28.8	20.2	30.7	23.7	19.8	12.7		
Sep-11	17.4	16.9	17.3	15.5	14.3	11.9	15.2	15.0	14.9	14.7	16.3	15.1	20.7	18.1	23.0	23.4	9.8	9.4		
Nov-12	28.2	16.9	15.6	14.8	46.3	11.3	14.4	13.7	21.6	15.1	21.2	14.9	19.8	19.2	25.4	21.8	10.2	9.0		
May-13	13.3	13.9	11.6	10.0	11.3	11.0	13.6	12.7	16.3	15.2	18.0	16.4	16.8	18.6	23.3	20.8	8.8	8.8		
Dec-13	18.1	17.6	14.0	15.5	17.1	13.4	18.1	17.0	13.3	12.8	16.5	16.4	16.9	19.0	21.8	19.7	9.6	9.5	60.4	57.7
Apr-14	18.0	18.3	15.3	16.3	14.9	14.4	16.6	16.3	14.5	13.5	16.7	15.9	14.4	15.1	21.8	21.0	10.2	9.9	58.2	56.0
Oct-14	18.1	14.7	15.2	14.3	13.6	12.9	17.7	15.2	12.6	11.1	14.0	14.1	15.0	14.7	19.9	20.3	7.7	8.9	54.8	60.7
Min	9.0	9.6	11.6	10.0	4.8	4.5	6.5	6.6	12.6	11.1	13.0	12.0	14.4	14.7	19.9	19.7	7.1	7.0	54.8	56.0
Max	28.2	18.7	23.9	17.5	46.3	15.3	23.8	18.0	27.8	18.0	27.0	19.0	28.8	20.2	30.7	23.7	19.8	12.7	60.4	60.7
Avg	18.2	16.2	16.1	14.6	17.6	12.4	16.1	14.6	17.5	14.7	17.8	15.4	20.2	17.8	23.4	21.6	10.3	9.4	57.8	58.1

DATE	Annual Network													
	MWQ-2		MWQ-14		MWQ-18		MWQ-19		MWQ-20		MWQ-21		MWQ-22	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04		35		12										
Jul-04		28		12		33								
Jul-05		29		12		31				92		44		29
Jun-07		25		11		31				29		37		34
Jan-09		31.3		12.6		34.3		28.9		25.1		42.2		65.1
Jan-10	30	30	11	12	61	29	25	23	28	28	58	32	56	51
Oct-10														
May-11	34.3	28.2	15.3	11.9	35.6	33.8	26.0	21.8	26.3	21.5	48.9	32.6	40.8	37.6
Sep-11														
Nov-12														
May-13	25	22.8	12.5	9.17	40.5	31.5	21.9	21.1	49.2	22.1	47.3	23.9	56.1	39.6
Dec-13														
Apr-14	27	27.4	13.4	11.9	34.1	33.5	42.3	32.9	28.7	24.2	33.8	28.3	36.5	37
Oct-14														
Min	24.6	22.8	11.0	9.2	34.1	29.0	21.9	21.1	26.3	21.5	33.8	23.9	36.5	29.0
Max	34.3	35.0	15.3	12.6	61.0	34.3	42.3	32.9	49.2	92.0	58.0	44.0	56.1	65.1
Avg	29.1	28.5	13.1	11.6	42.8	32.1	28.8	25.5	33.1	34.6	47.0	34.3	47.4	41.9

Notes:

Data in µg/L

NMED SSL Tapwater Screening Level: 3277.35 µg/L

Red indicates exceedance

Blank cells indicate no data

Wells MWQ-3, -4, -5, -6, -7, -10, -23, and MWL-6 not sampled after spring 2011

TABLE 6d
BARIUM

TABLE 6d
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

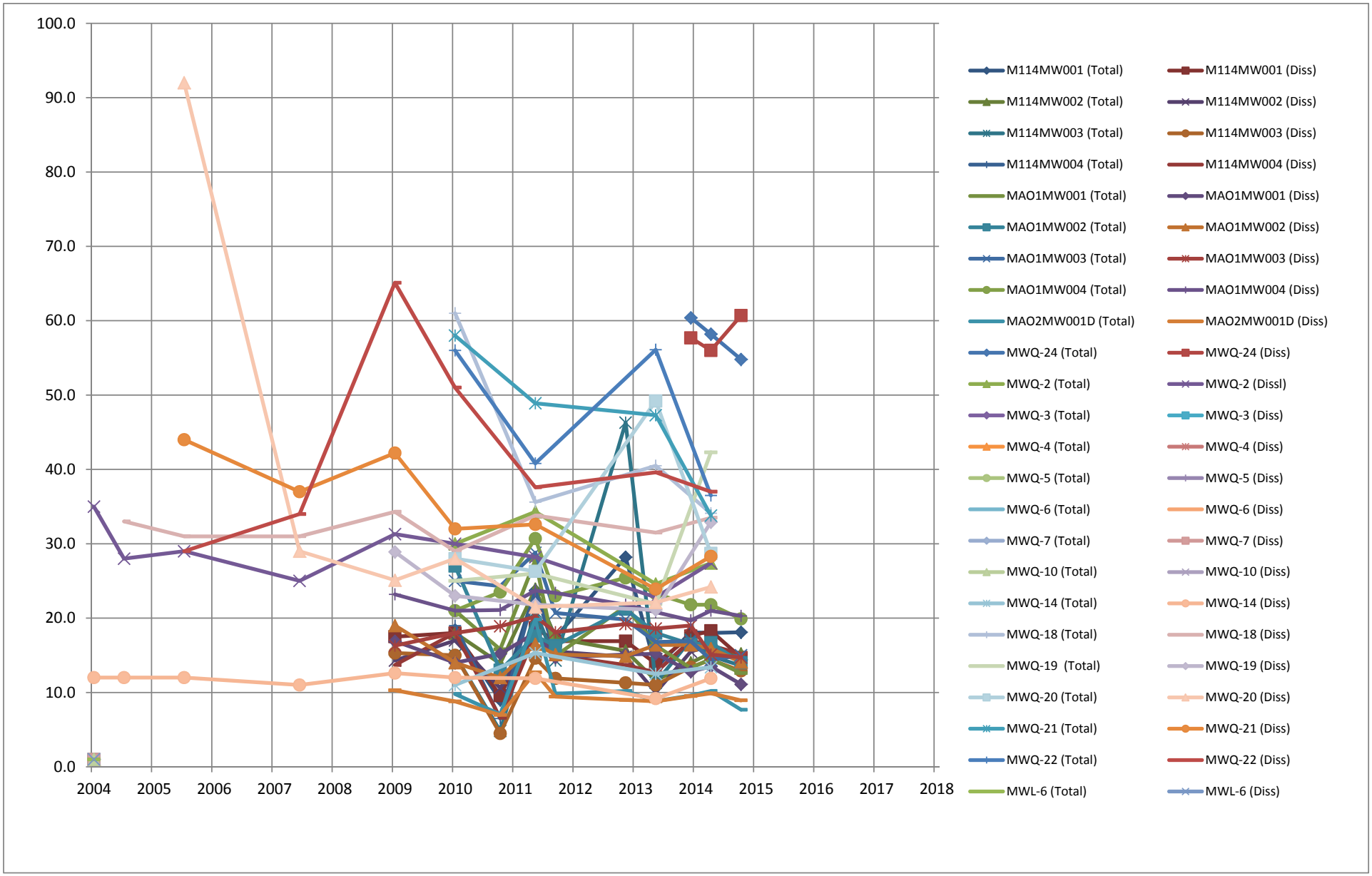
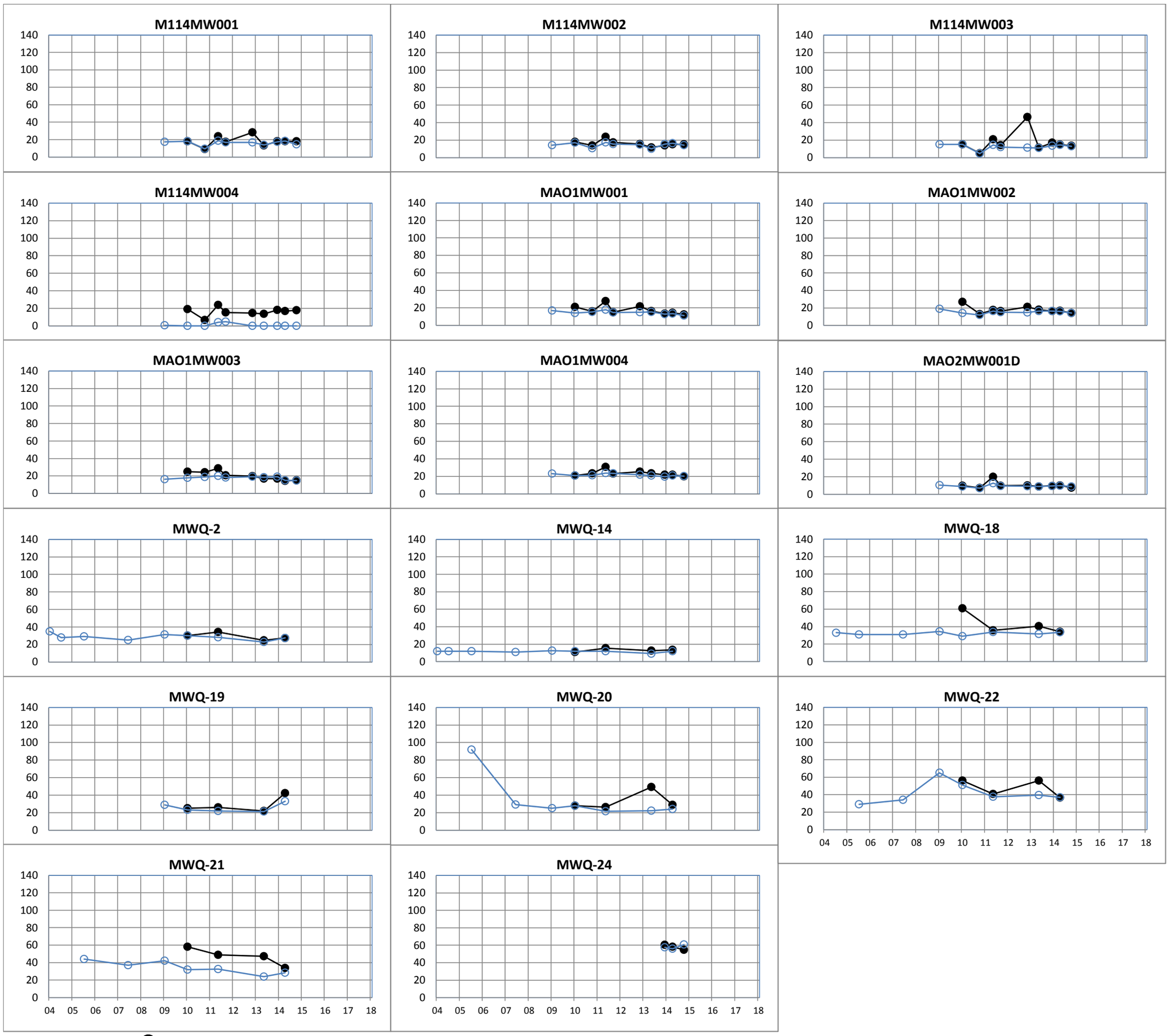


TABLE 6d
BARIUM

TABLE 6d
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO



Notes:

Data in µg/L

Total Concentration

Dissolved Concentration

TABLE 6d
BARIUM

TABLE 6e
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

DATE	Semiannual Network																			
	SWMU 114								SWMU 130								SWMU 131			
	M114MW001		M114MW002		M114MW003		M114MW004		MAO1MW001		MAO1MW002		MAO1MW003		MAO1MW004		MAO2MW001D		MWQ-24	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04																				
Jul-04																				
Jul-05																				
Jun-11																				
Jan-09				0.054		0.051														
Jan-10	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
Oct-10	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
May-11	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
Sep-11	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
Nov-12	<D.L.	<D.L.	1.6	0.2	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	0.9	<D.L.	<D.L.	<D.L.		
May-13	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
Dec-13	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Apr-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Oct-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Min	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max	0.0	0.0	1.6	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0
Avg	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0

DATE	Annual Network													
	MWQ-2		MWQ-14		MWQ-18		MWQ-19		MWQ-20		MWQ-21		MWQ-22	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04		0.33		<D.L.										
Jul-04		<D.L.		<D.L.		<D.L.								
Jul-05		<D.L.		<D.L.		<D.L.				<D.L.		<D.L.		<D.L.
Jun-11														
Jan-09		0.044		0.041		<D.L.		0.048		<D.L.		<D.L.		<D.L.
Jan-10	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Oct-10														
May-11	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Sep-11														
Nov-12														
May-13	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Dec-13														
Apr-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Oct-14														
Min	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Data in µg/L

NMED SSL Tapwater Screening Level: 12.39 µg/L

Red indicates exceedance

Blank cells indicate no data

Wells MWQ-3, -4, -5, -6, -7, -10, -23, and MWL-6 not sampled after spring 2011

Due to a preponderance of no detects trends are not plotted

TABLE 6e
BERYLLIUM

TABLE 6f
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

DATE	Semiannual Network																			
	SWMU 114								SWMU 130								SWMU 131			
	M114MW001		M114MW002		M114MW003		M114MW004		MAO1MW001		MAO1MW002		MAO1MW003		MAO1MW004		MAO2MW001D		MWQ-24	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04																				
Jul-04																				
Jul-05																				
Jun-07																				
Jan-09		390,000		303,000		422,000		373,000		53,500		44,000		61,200		44,000		123,000		
Jan-10	280,000	280,000	250,000	260,000	340,000	370,000	350,000	340,000	50,000	46,000	41,000	37,000	63,000	61,000	41,000	42,000	120,000	110,000		
Oct-10	262,000	277,000	253,000	263,000	354,000	360,000	328,000	320,000	49,100	50,300	36,900	35,200	66,600	60,700	37,400	36,600	111,900	115,000		
May-11	269,000	280,000	252,000	257,000	342,000	342,000	326,000	338,000	49,700	50,800	35,100	37,400	63,100	59,600	38,200	36,800	127,000	127,000		
Sep-11	259,000	285,000	251,000	267,000	317,000	334,000	303,000	339,000	51,000	51,300	39,000	39,100	64,100	58,600	39,300	39,900	114,000	119,000		
Nov-12	273,000	263,000	263,000	271,000	342,000	333,000	312,000	373,000	47,400	49,100	38,900	37,600	59,800	61,300	38,300	34,400	110,000	107,000		
May-13	281,000	254,000	294,000	276,000	343,000	348,000	329,000	319,000	45,500	46,800	38,900	38,500	60,300	64,700	39,000	35,500	108,000	106,000		
Dec-13	358,000	331,000	352,000	342,000	447,000	379,000	391,000	384,000	52,200	48,700	42,900	42,100	69,100	67,600	44,600	40,900	154,000	141,000	52,800	49,500
Apr-14	382,000	401,000	355,000	340,000	414,000	425,000	461,000	439,000	52,700	50,400	45,000	41,900	66,300	66,700	42,200	42,600	153,000	133,000	45,600	43,700
Oct-14	317,000	301,000	346,000	340,000	413,000	410,000	402,000	404,000	52,700	47,600	44,400	44,400	69,800	67,200	40,800	41,400	132,000	141,000	43,600	47,800
Min	259000	254000	250000	257000	317000	333000	303000	319000	45500	46000	35100	35200	59800	58600	37400	34400	108000	106000	43600	43700
Max	382000	401000	355000	342000	447000	425000	461000	439000	52700	53500	45000	44400	69800	67600	44600	44000	154000	141000	52800	49500
Avg	297889	306200	290667	291900	368000	372300	355778	362900	50033	49450	40233	39720	64678	62860	40089	39410	125544	122200	47333	47000

DATE	Annual Network													
	MWQ-2		MWQ-14		MWQ-18		MWQ-19		MWQ-20		MWQ-21		MWQ-22	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04		190,000		75,000										
Jul-04		190,000		69,000		40,000								
Jul-05		190,000		68,000		42,000				430,000		180,000		31,000
Jun-07		190,000		80,000		42,000				560,000		170,000		35,000
Jan-09		201,000		69,900		38,800		334,000		628,000		182,000		56,600
Jan-10	200,000	210,000	72,000	78,000	47,000	44,000	310,000	320,000	560,000	560,000	140,000	140,000	68,000	74,000
Oct-10														
May-11	187,000	204,000	65,900	66,700	41,200	44,400	286,000	285,000	556,000	544,000	122,000	120,000	37,300	38,500
Sep-11														
Nov-12														
May-13	188,000	183,000	66,300	63,000	43,900	40,200	302,000	283,000	565,000	547,000	116,000	99,800	76,400	71,100
Dec-13														
Apr-14	238,000	236,000	85,200	78,200	46,800	47,700	346,000	351,000	752,000	683,000	95,200	110,000	51,100	50,700
Oct-14														
Min	187000	183000	65900	63000	41200	38800	286000	283000	556000	430000	116000	99800	37300	31000
Max	200000	210000	72000	80000	47000	44400	310000	334000	565000	628000	140000	182000	76400	74000
Avg	191667	194750	68067	71200	44033	41629	299333	305500	560333	544833	126000	148633	60567	51033

Notes:

Data in µg/L

NMED SSL Tapwater Screening Level: N/A

Red indicates exceedance

Blank cells indicate no data

Wells MWQ-3, -4, -5, -6, -7, -10, -23, and MWL-6 not sampled after spring 2011

TABLE 6f
CALCIUM

TABLE 6f
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

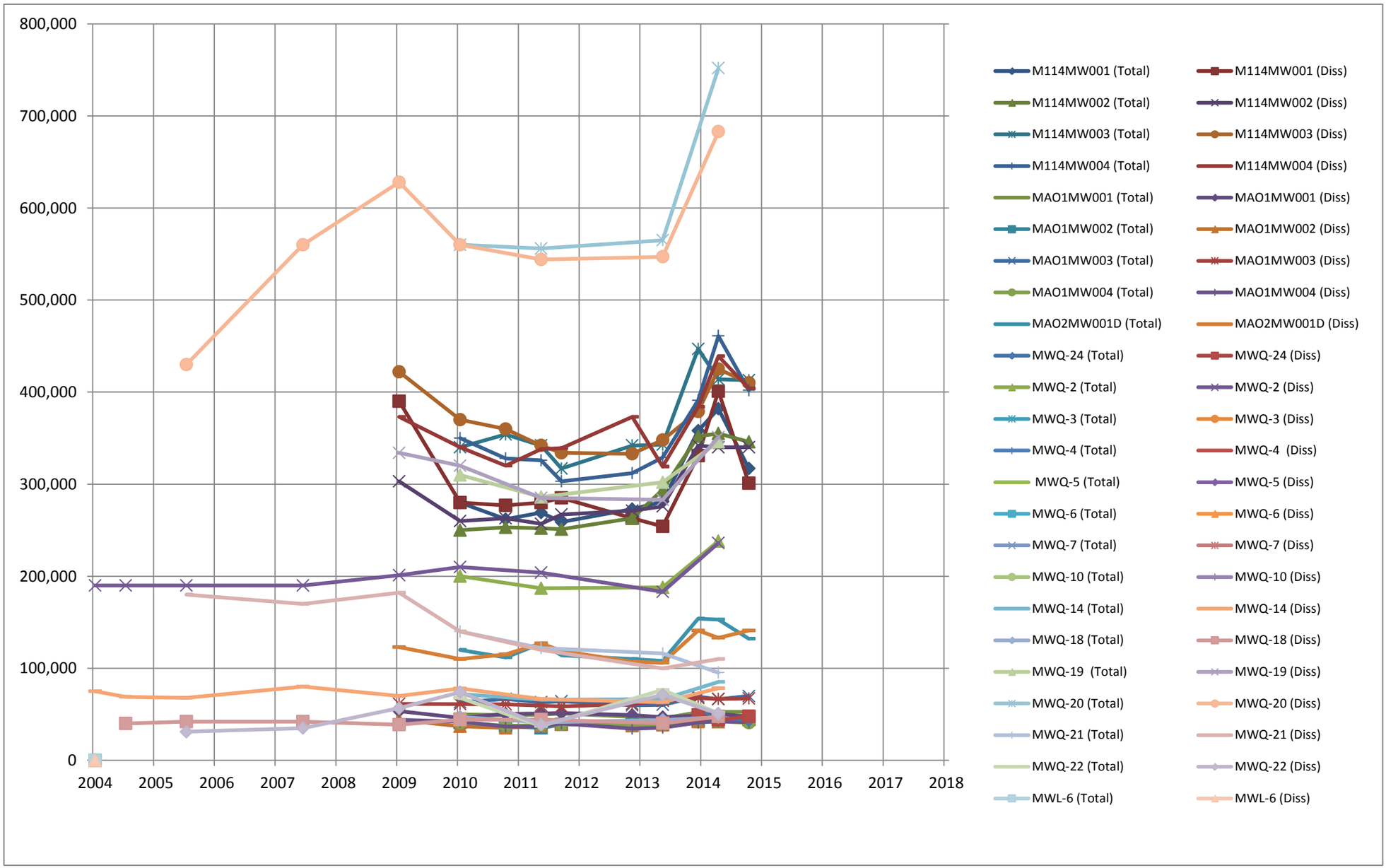
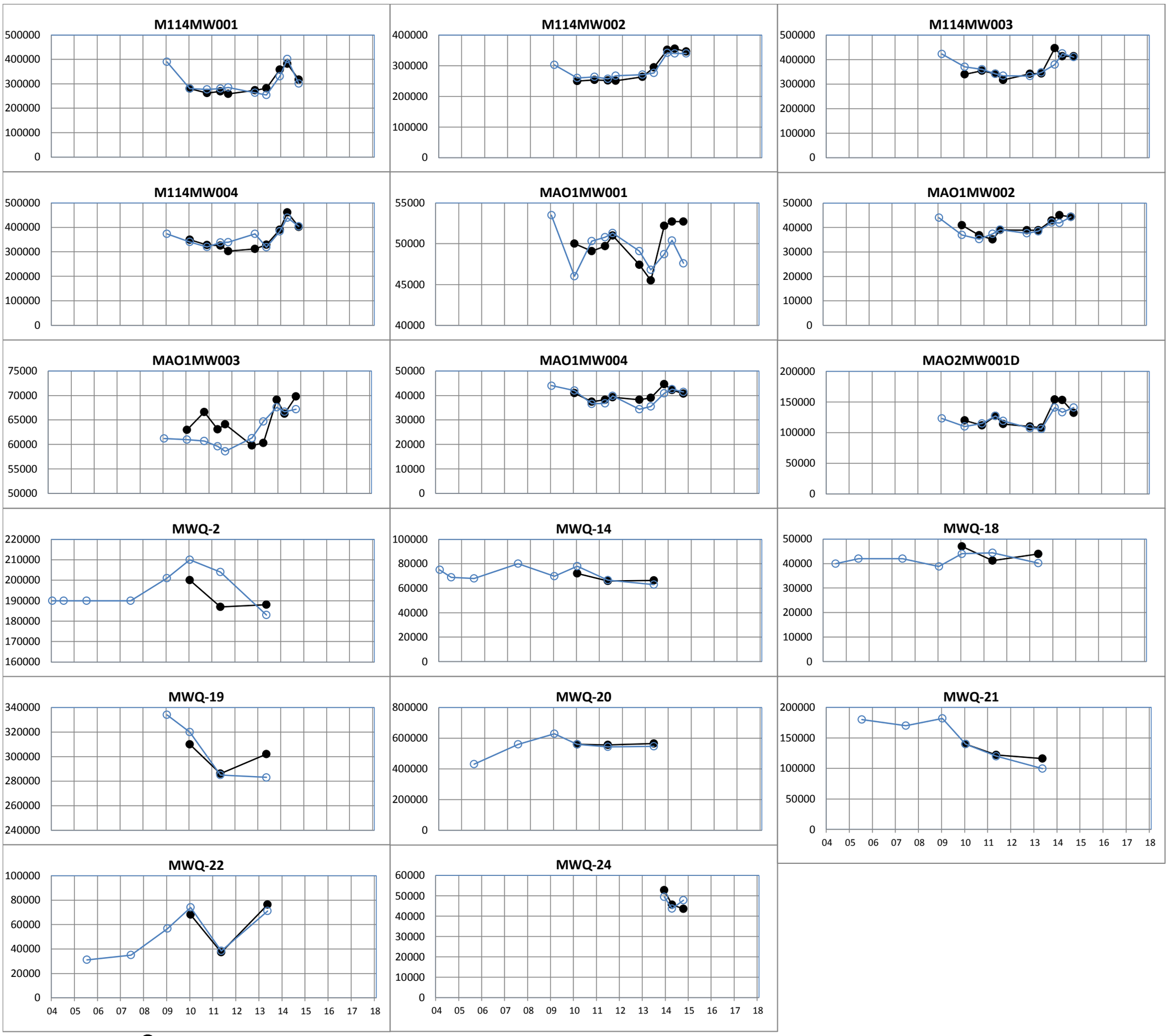


TABLE 6f
CALCIUM

TABLE 6f
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO



Notes:

Data in µg/L

Total Concentration

Dissolved Concentration

TABLE 6f
CALCIUM

TABLE 6g
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES NEW MEXICO

DATE	Semiannual Network																			
	SWMU 114								SWMU 130								SWMU 131			
	M114MW001		M114MW002		M114MW003		M114MW004		MAO1MW001		MAO1MW002		MAO1MW003		MAO1MW004		MAO2MW001D		MWQ-24	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04																				
Jul-04																				
Jul-05																				
Jun-07																				
Jan-09		2.80		5.30		0.13		5.60		0.92		3.20		0.16		1.40				
Jan-10	1.0	1.1	0.95	0.96	1.2	1.4	1.3	1.0	0.47	<D.L.	<D.L.	<D.L.	0.53	0.50	<D.L.	<D.L.	0.69	0.58		
Oct-10	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
May-11	0.31	0.88	<D.L.	0.69	<D.L.	0.81	0.35	0.90	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
Sep-11	1.16	1.19	1.37	1.12	1.53	1.23	1.58	1.40	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
Nov-12	1.08	2.09	0.75	1.14	2.32	1.11	1.24	2.31	0.36	<D.L.	<D.L.	0.52	0.63	0.64	0.64	0.26	0.37	0.32		
May-13	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
Dec-13	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Apr-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Oct-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Min	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max	1.2	2.8	1.4	5.3	2.3	1.4	1.6	5.6	0.5	0.9	0.0	3.2	0.6	0.6	0.6	1.4	0.7	0.6	0.0	0.0
Avg	0.5	1.0	0.4	1.2	0.7	0.6	0.6	1.4	0.1	0.1	0.0	0.5	0.2	0.2	0.1	0.2	0.2	0.1	0.0	0.0

DATE	Annual Network													
	MWQ-2		MWQ-14		MWQ-18		MWQ-19		MWQ-20		MWQ-21		MWQ-22	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04		<D.L.		0.053										
Jul-04		0.078		0.059		<D.L.								
Jul-05		<D.L.		0.053		<D.L.				0.28		<D.L.		<D.L.
Jun-07		0.11		0.10		<D.L.				0.091		<D.L.		<D.L.
Jan-09		0.13		0.13		1.30		1.40		0.61		2.00		2.20
Jan-10	0.98	1.2	0.70	0.60	<D.L.	<D.L.	0.93	0.77	1.2	1.2	0.65	0.69	<D.L.	<D.L.
Oct-10														
May-11	<D.L.	0.49	<D.L.	<D.L.	0.65	1.01	1.11	1.27	1.93	2.01	0.51	0.69	<D.L.	<D.L.
Sep-11														
Nov-12														
May-13	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Dec-13														
Apr-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Oct-14														
Min	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max	1.0	1.2	0.7	0.6	0.7	1.3	1.1	1.4	1.9	2.0	0.7	2.0	0.0	2.2
Avg	0.2	0.2	0.2	0.1	0.2	0.3	0.5	0.7	0.8	0.6	0.3	0.5	0.0	0.3

Notes:
Data in µg/L
NMED SSL Tapwater Screening Level: 6.24 µg/L
Red indicates exceedance
Blank cells indicate no data
Wells MWQ-3, -4, -5, -6, -7, -10, -23, and MWL-6 not sampled after spring 2011

TABLE 6g
CADMIUM

TABLE 6g
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES NEW MEXICO

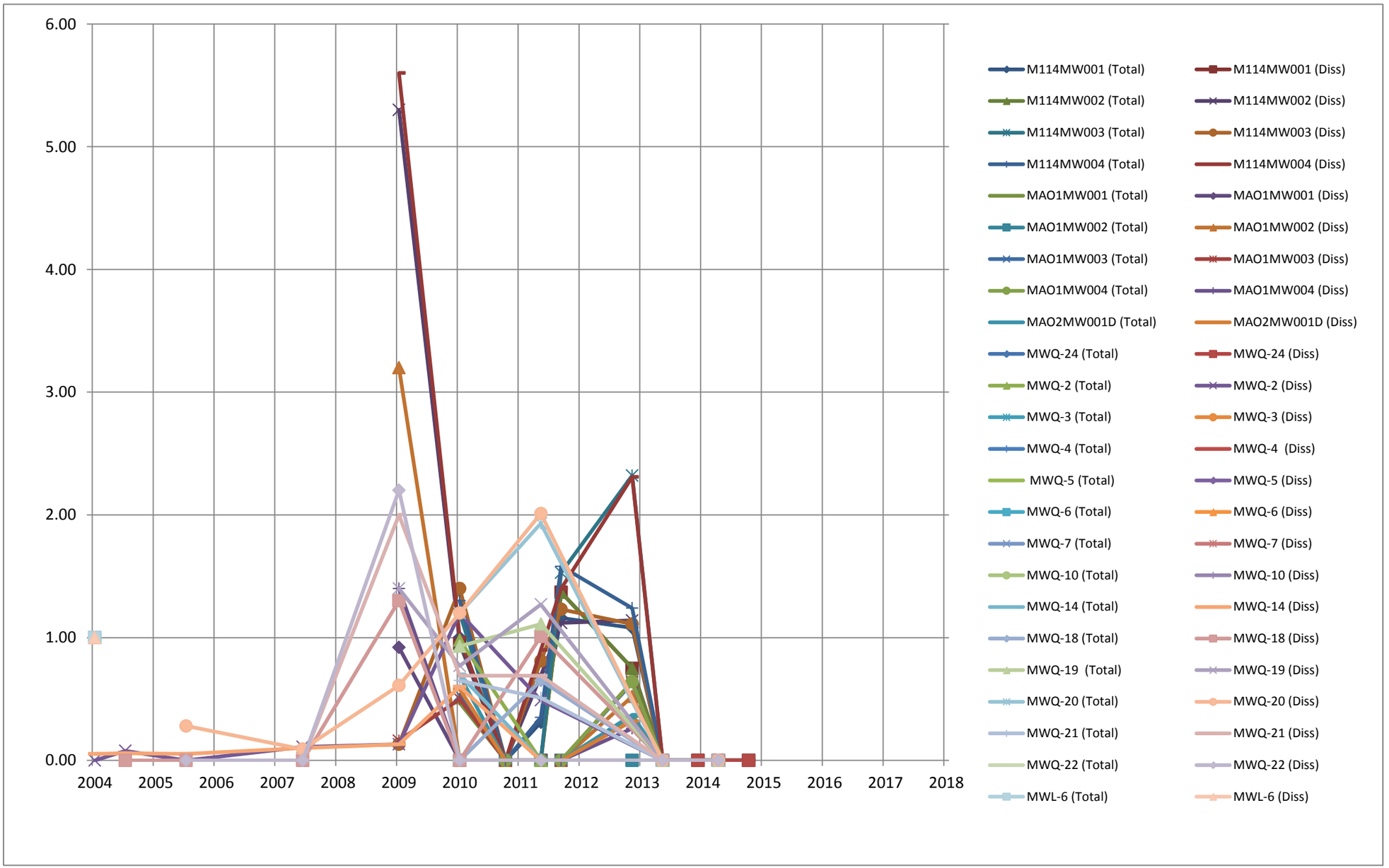
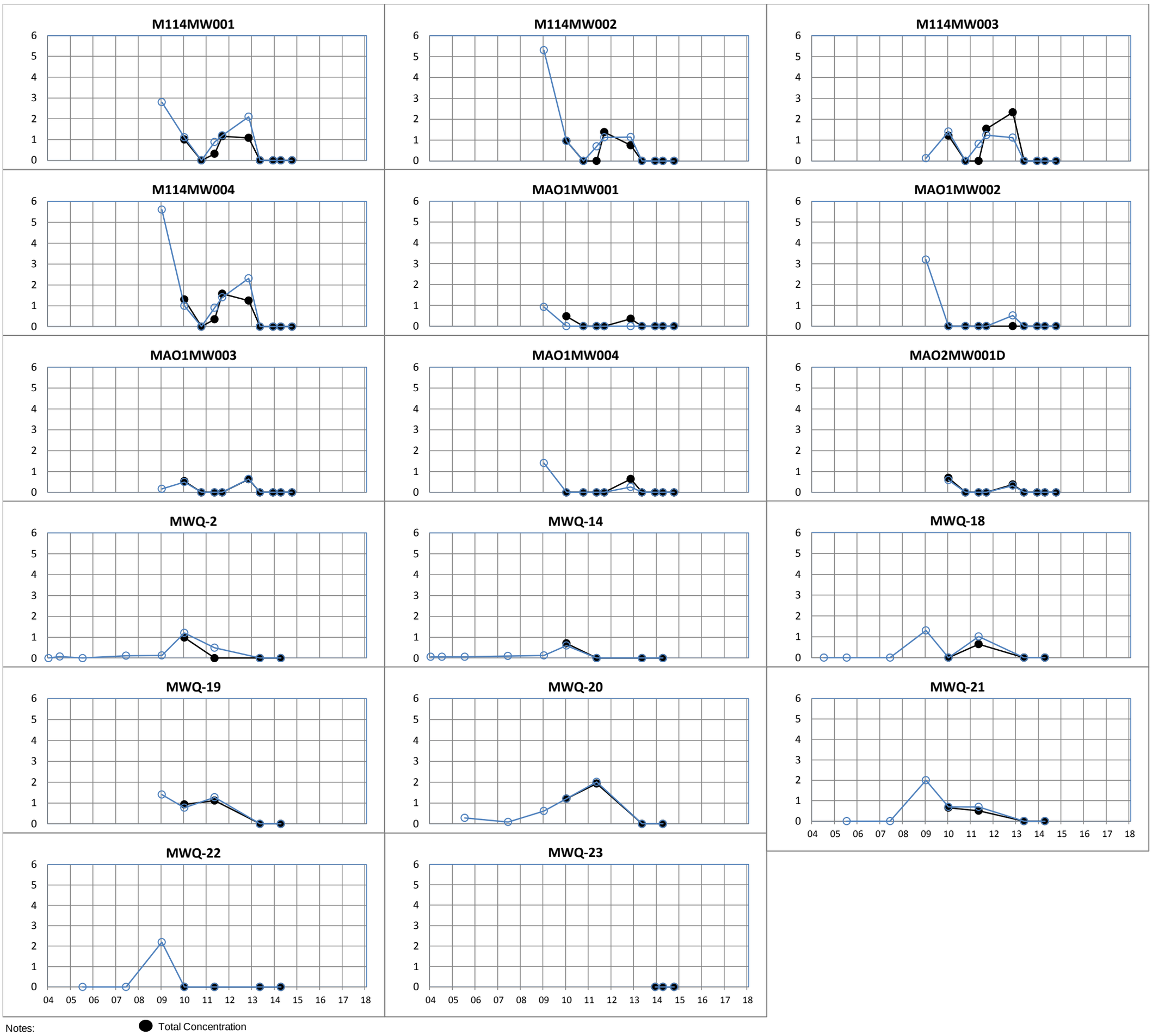


TABLE 6g
CADMIUM

TABLE 6g
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO



Notes:

Data in µg/L

TABLE 6g
CADMIUM

TABLE 6h
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

DATE	Semiannual Network																			
	SWMU 114								SWMU 130								SWMU 131			
	M114MW001		M114MW002		M114MW003		M114MW004		MAO1MW001		MAO1MW002		MAO1MW003		MAO1MW004		MAO2MW001D		MWQ-24	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04																				
Jul-04																				
Jul-05																				
Jun-07																				
Jan-09		0.50		0.39		0.55		0.52		0.48		0.18		0.077		0.12		0.46		
Jan-10	<D.L.	<D.L.	<D.L.	<D.L.	1.6	2.4	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
Oct-10	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	12.7	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
May-11	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
Sep-11	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
Nov-12	1.38	<D.L.	<D.L.	1.24	2.23	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	1.46	<D.L.	<D.L.	1.11	1.89	1.48		
May-13	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
Dec-13	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Apr-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Oct-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Min	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max	1.4	0.5	0.0	1.2	2.2	2.4	0.0	12.7	0.0	0.5	0.0	0.2	1.5	0.1	0.0	1.1	1.9	1.5	0.0	0.0
Avg	0.2	0.1	0.0	0.2	0.4	0.3	0.0	1.3	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.2	0.2	0.0	0.0

DATE	Annual Network													
	MWQ-2		MWQ-14		MWQ-18		MWQ-19		MWQ-20		MWQ-21		MWQ-22	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04		4.1		0.45										
Jul-04		2.9		0.45		0.14								
Jul-05		1.3		0.33		0.120				2.80		0.57		0.35
Jun-07		8.4		6.8		1.6				12		2.7		3.3
Jan-09		1.0		0.13		0.071		0.220		2.4		0.03		0.43
Jan-10	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Oct-10														
May-11	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	1.23	1.10	<D.L.	<D.L.	<D.L.	<D.L.
Sep-11														
Nov-12														
May-13	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Dec-13														
Apr-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	0.36	<D.L.	<D.L.	<D.L.
Oct-14														
Min	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max	0.0	8.4	0.0	6.8	0.0	1.6	0.0	0.2	1.2	12.0	0.4	2.7	0.0	3.3
Avg	0.0	2.0	0.0	0.9	0.0	0.2	0.0	0.0	0.3	2.6	0.1	0.5	0.0	0.6

Notes:

Data in µg/L

NMED SSL Tapwater Screening Level: N/A

Red indicates exceedance

Blank cells indicate no data

Wells MWQ-3, -4, -5, -6, -7, -10, -23, and MWL-6 not sampled after spring 2011

TABLE 6h
COBALT

TABLE 6h
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

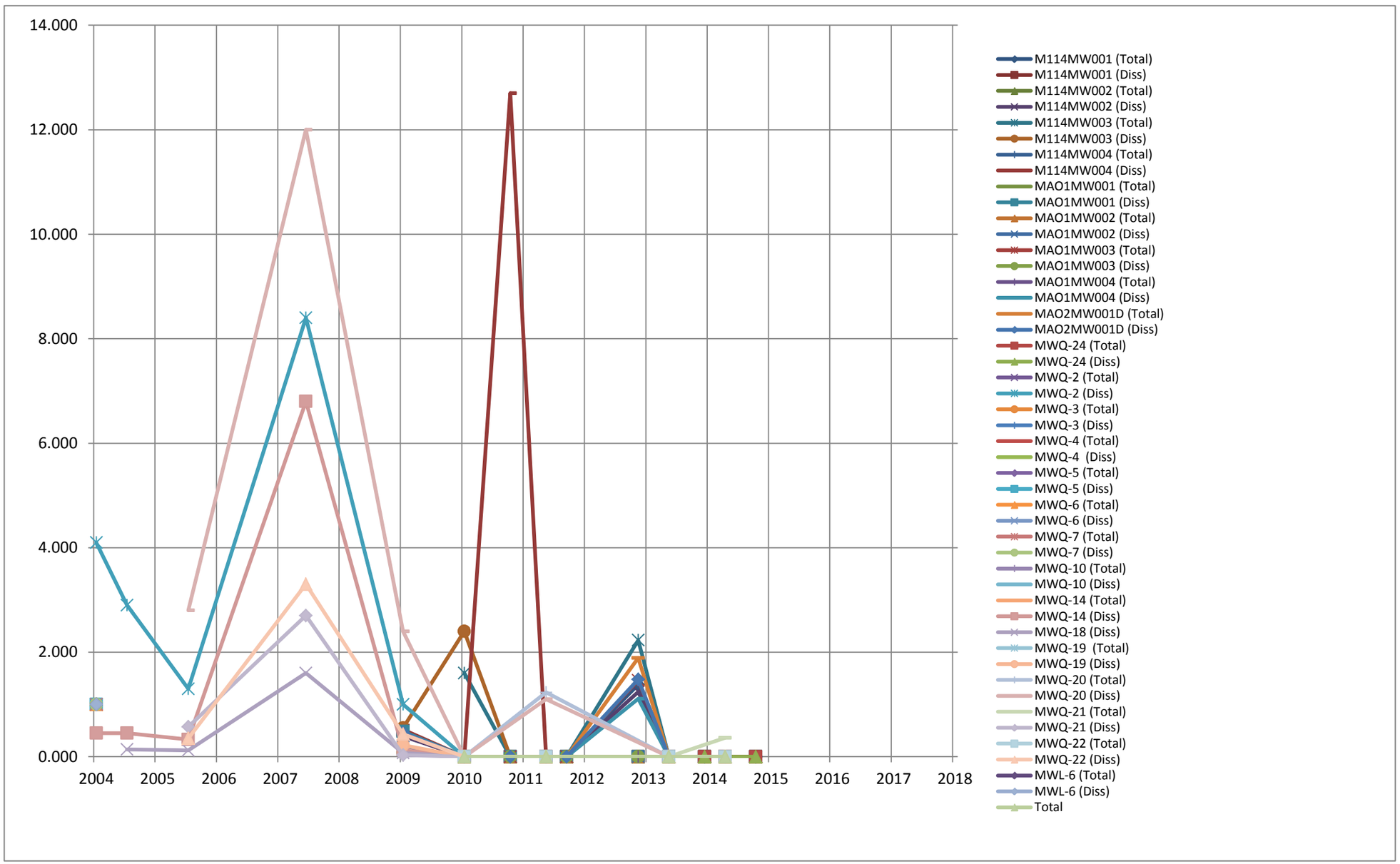
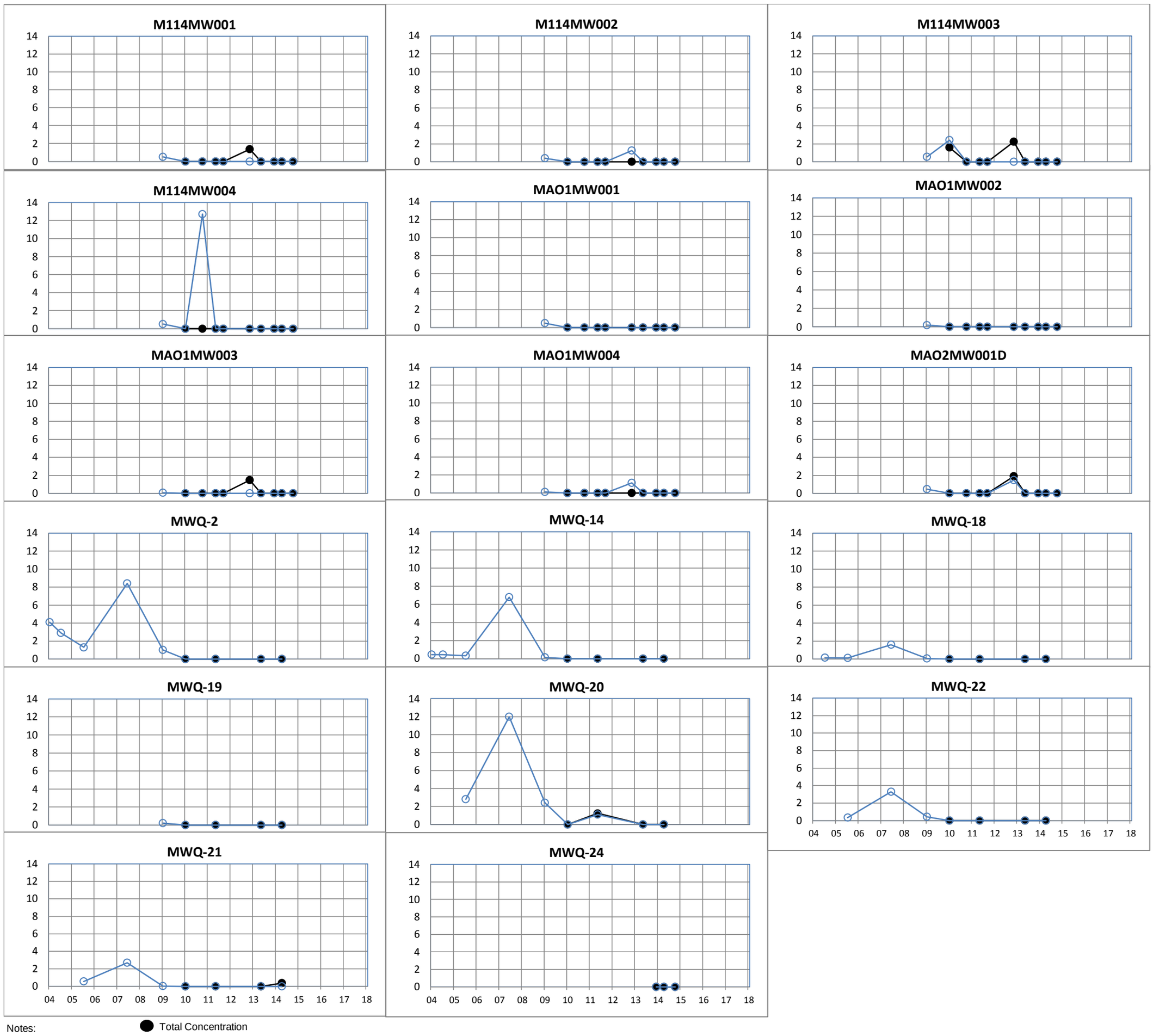


TABLE 6h
COBALT

TABLE 6h
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO



Notes:

Data in µg/L

TABLE 6h
COBALT

TABLE 6i
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

DATE	Semiannual Network																			
	SWMU 114								SWMU 130								SWMU 131			
	M114MW001		M114MW002		M114MW003		M114MW004		MAO1MW001		MAO1MW002		MAO1MW003		MAO1MW004		MAO2MW001D		MWQ-24	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04																				
Jul-04																				
Jul-05																				
Jun-07																				
Jan-09		3.00		4.30		3.60		**7.80**		2.20		3.50		1.90		2.20		1.20		
Jan-10	2.60	2.40	4.20	3.00	2.70	2.50	2.10	2.20	1.80	0.87	3.60	2.10	1.40	0.84	1.40	1.30	<D.L.	<D.L.		
Oct-10	4.27	4.27	**7.10**	**6.04**	3.52	3.20	4.03	2.04	2.43	2.72	2.93	2.11	**17.10**	**6.68**	2.81	1.20	1.71	1.74		
May-11	**7.48**	5.00	**8.55**	**5.75**	**6.04**	3.89	5.33	4.02	**8.54**	2.24	3.05	2.09	4.46	2.19	5.09	1.30	2.52	1.46		
Sep-11	**8.46**	4.17	4.92	3.73	2.88	1.33	4.29	2.38	1.06	<D.L.	2.47	1.12	1.96	<D.L.	1.21	<D.L.	1.31	<D.L.		
Nov-12	**41.70**	4.87	**13.10**	4.67	**70.70**	1.55	**6.81**	4.00	**15.50**	1.61	**14.20**	1.51	**13.00**	1.12	**5.63**	<D.L.	5.11	<D.L.		
May-13	3.90	3.85	2.87	<D.L.	**9.90**	5.13	2.72	<D.L.	4.55	<D.L.	**5.72**	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
Dec-13	2.72	2.63	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	0.04	0.03
Apr-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	1.64	3.19	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	0.66	0.62
Oct-14	3.92	3.98	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	1.70	1.45	<D.L.	<D.L.	0.79	0.66	<D.L.	<D.L.	0.57	0.58
Min	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max	41.7	5.0	13.1	6.0	70.7	5.1	6.8	7.8	15.5	2.7	14.2	3.5	17.1	6.7	5.6	2.2	5.1	1.7	0.7	0.6
Avg	8.3	3.4	4.5	2.7	10.6	2.1	2.8	2.2	3.8	1.0	3.9	1.7	4.2	1.3	1.9	0.7	1.2	0.4	0.4	0.4

DATE	Annual Network													
	MWQ-2		MWQ-14		MWQ-18		MWQ-19		MWQ-20		MWQ-21		MWQ-22	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04		2.50		2.00										
Jul-04		0.81		1.10		1.50								
Jul-05		4.20		1.60		1.50				3.40		1.40		0.98
Jun-07		1.40		1.70		1.70				2.90		1.10		0.94
Jan-09		2.60		2.00		0.88		**33.60**		2.50		1.60		1.20
Jan-10	1.40	<D.L.	1.70	1.40	3.80	0.80	0.77	<D.L.	1.50	<D.L.	2.30	0.70	0.99	<D.L.
Oct-10														
May-11	2.53	2.25	2.31	1.98	**15.90**	<D.L.	2.38	2.18	3.38	2.58	4.41	1.95	<D.L.	<D.L.
Sep-11														
Nov-12														
May-13	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	**5.78**	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Dec-13														
Apr-14	<D.L.	<D.L.	<D.L.	<D.L.	0.75	0.65	22.60	<D.L.	<D.L.	<D.L.	1.13	0.49	<D.L.	<D.L.
Oct-14														
Min	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max	2.5	4.2	2.3	2.0	15.9	1.7	22.6	33.6	5.8	3.4	4.4	2.0	1.0	1.2
Avg	1.0	1.5	1.0	1.3	5.1	0.9	6.4	7.2	2.7	1.6	2.0	1.0	0.2	0.4

Notes:

Data in µg/L

NMED SSL Tapwater Screening Level: 5.59 µg/L

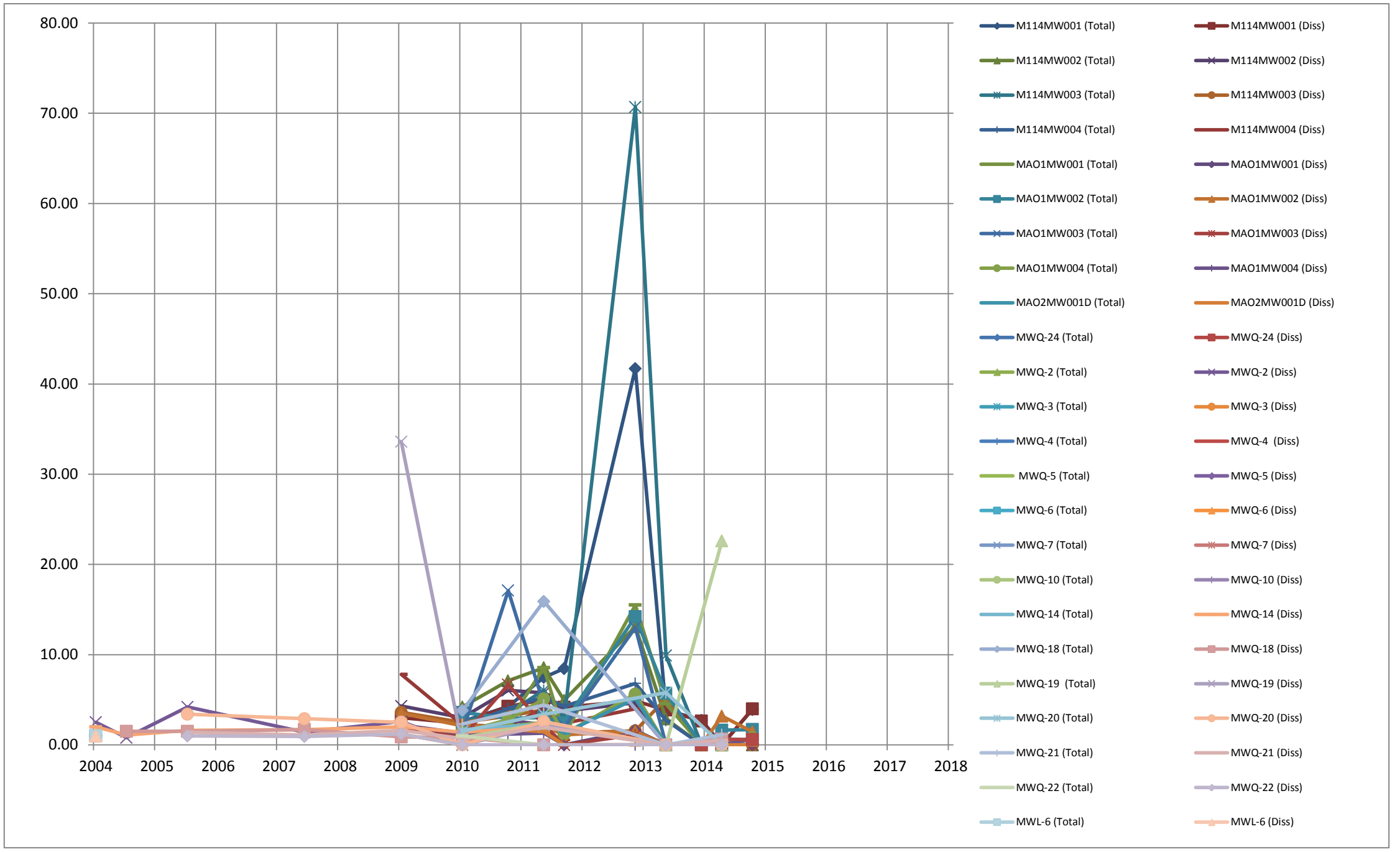
Red indicates exceedance

Blank cells indicate no data

Wells MWQ-3, -4, -5, -6, -7, -10, -23, and MWL-6 not sampled after spring 2011

TABLE 6i
CHROMIUM

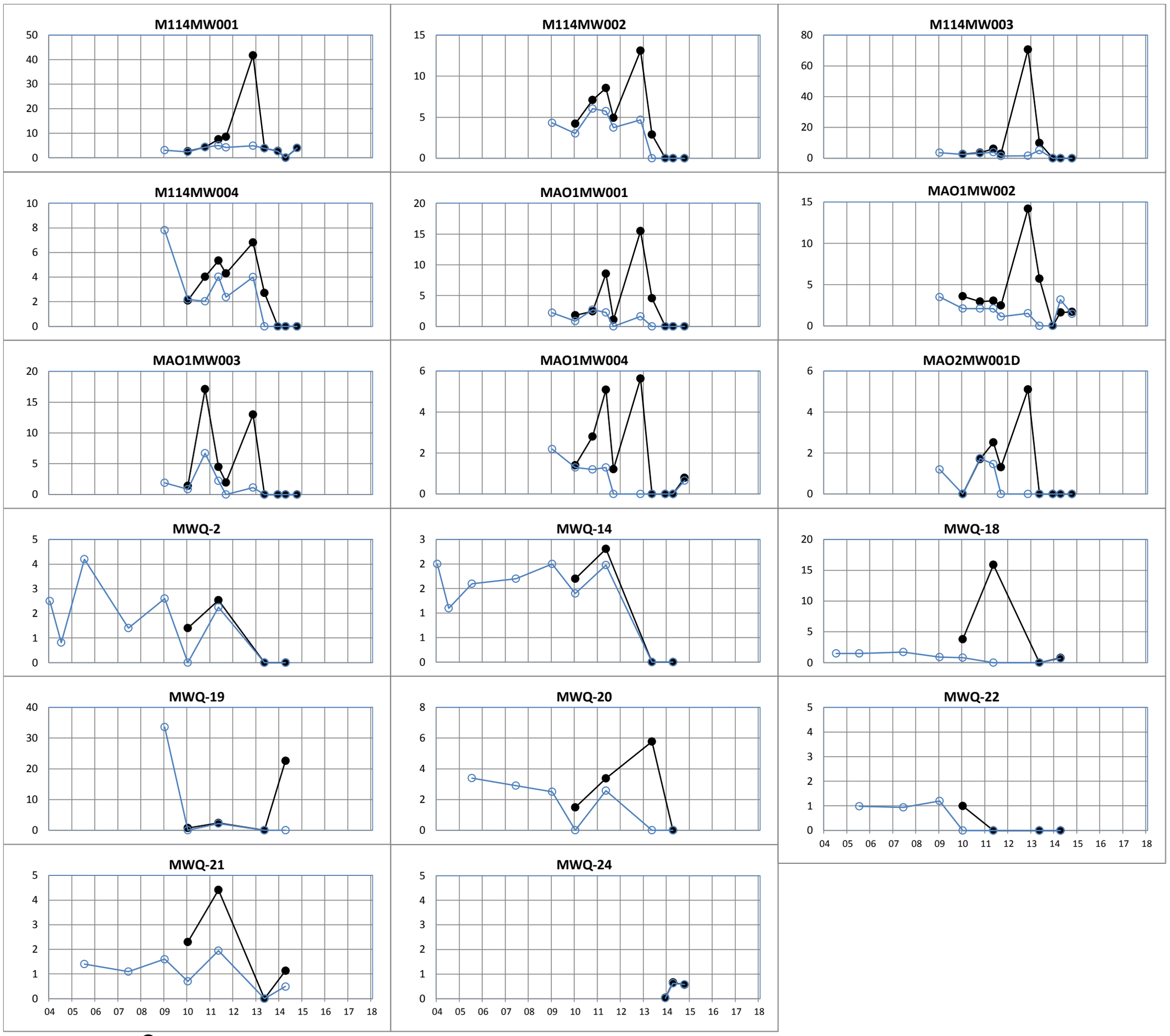
TABLE 6i
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO



/L

TABLE 6i
CHROMIUM

TABLE 6i
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO



Notes:

Data in µg/L

TABLE 6i
CHROMIUM

TABLE 6j
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRRY COUNTIES, NEW MEXICO

DATE	Semiannual Network																			
	SWMU 114								SWMU 130								SWMU 131			
	M114MW001		M114MW002		M114MW003		M114MW004		MAO1MW001		MAO1MW002		MAO1MW003		MAO1MW004		MAO2MW001D		MWQ-24	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04																				
Jul-04																				
Jul-05																				
Jun-07																				
Jan-09																				
Jan-10	21	7.0	47	7.0	9.6	6.1	7.0	10.0	5.2	7.8	13.0	6.4	8.3	<D.L.	<D.L.		<D.L.	<D.L.		
Oct-10	28	3	8	20	21	10	12	<D.L.	6		6		6	6	15	7	14	<D.L.		
May-11	<D.L.		<D.L.		<D.L.		<D.L.		<D.L.		<D.L.		18		7		<D.L.			
Sep-11	<D.L.		<D.L.		<D.L.		<D.L.		<D.L.		<D.L.		<D.L.		<D.L.		<D.L.			
Nov-12	<D.L.		<D.L.		<D.L.		<D.L.		<D.L.		<D.L.		<D.L.		<D.L.		<D.L.			
May-13	<D.L.		<D.L.		<D.L.		<D.L.		<D.L.		<D.L.		<D.L.		<D.L.		<D.L.			
Dec-13	2.47		0.49		0.75		1.08		0.74		2.02		0.45		0.68		<D.L.		0.253	
Apr-14	0.847		0.905		0.828		0.643		0.327		1.70		0.371		0.643		<D.L.		0.604	
Oct-14	4.02		1.71		0.76		1.40		0.719		1.48		0.42		0.719		<D.L.		0.560	
Min	0.0	3.0	0.0	7.0	0.0	6.1	0.0	0.0	0.0	7.8	0.0	6.4	0.0	0.0	0.0	7.0	0.0	0.0	0.3	0.0
Max	28.0	7.0	47.0	20.0	21.0	10.0	12.0	10.0	6.0	7.8	13.0	6.4	18.0	6.0	15.0	7.0	14.0	0.0	0.6	0.0
Avg	6.3	5.0	6.5	13.5	3.7	8.1	2.5	5.0	1.4	7.8	2.7	6.4	3.7	3.0	2.7	7.0	1.6	0.0	0.5	0.0

DATE	Annual Network													
	MWQ-2		MWQ-14		MWQ-18		MWQ-19		MWQ-20		MWQ-21		MWQ-22	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04														
Jul-04														
Jul-05														
Jun-07														
Jan-09														
Jan-10	<D.L.	<D.L.	7.8	7.0	26.0	4.4	13.0	6.4	<D.L.	<D.L.	22.0	6.4	6.4	4.5
Oct-10														
May-11	3		<D.L.		<D.L.		<D.L.		<D.L.		32.0		<D.L.	
Sep-11														
Nov-12														
May-13	<D.L.		<D.L.		<D.L.		<D.L.		<D.L.		<D.L.		<D.L.	
Dec-13														
Apr-14	<D.L.		0.51		0.65		0.13		<D.L.		0.48		0.03	
Oct-14														
Min	0.0	0.0	0.0	7.0	0.0	4.4	0.0	6.4	0.0	0.0	0.0	6.4	0.0	4.5
Max	3.0	0.0	7.8	7.0	26.0	4.4	13.0	6.4	0.0	0.0	32.0	6.4	6.4	4.5
Avg	0.8	0.0	2.1	7.0	6.7	4.4	3.3	6.4	0.0	0.0	13.6	6.4	1.6	4.5

Notes:

Data in µg/L

NMED SSL Tapwater Screening Level: 0.25 µg/L

Red indicates exceedance

Blank cells indicate no data

Wells MWQ-3, -4, -5, -6, -7, -10, -23, and MWL-6 not sampled after spring 2011

TABLE 6j
HEXAVALENT CHROMIUM

TABLE 6j
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRRY COUNTIES, NEW MEXICO

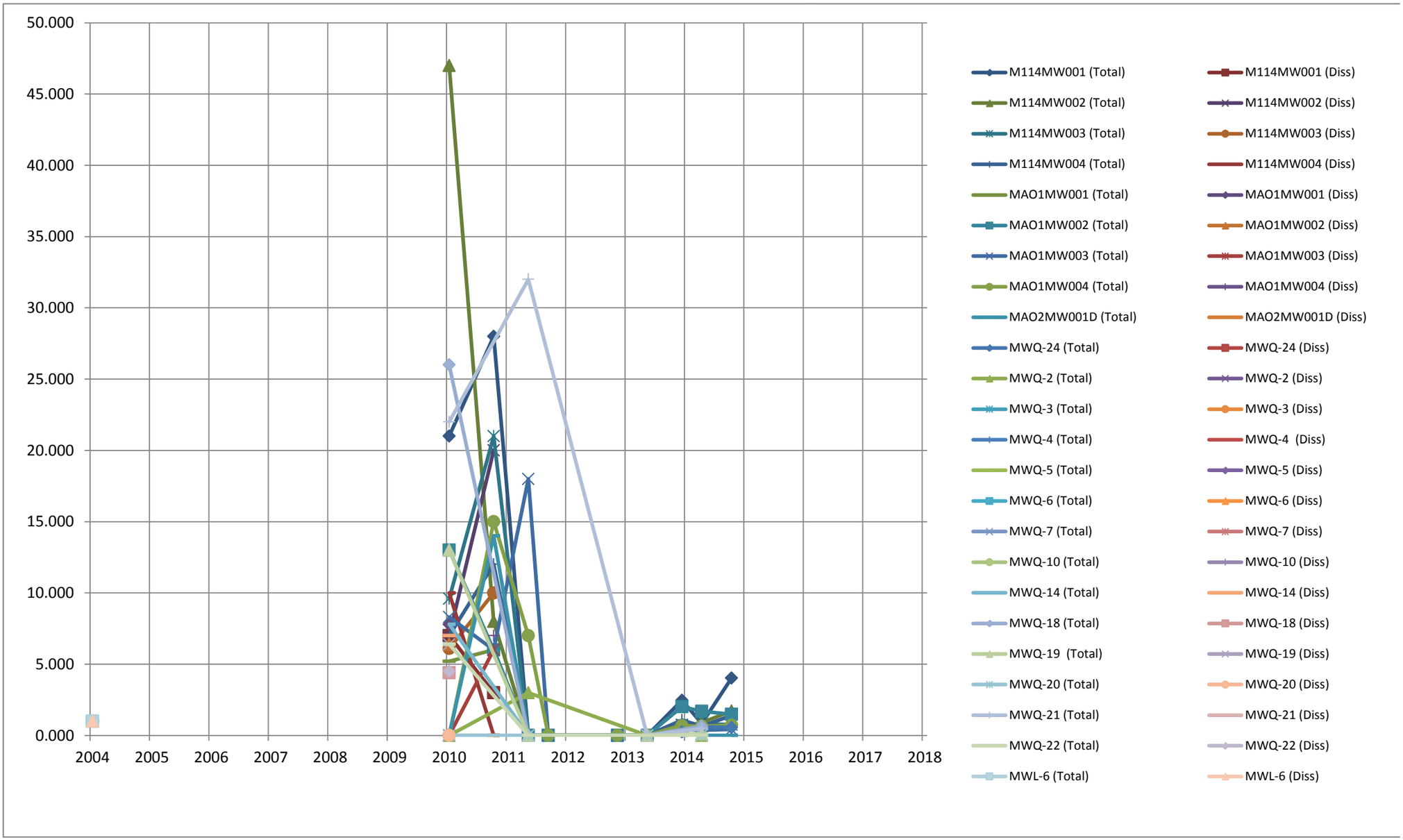


TABLE 6j
HEXAVALENT CHROMIUM

TABLE 6j
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

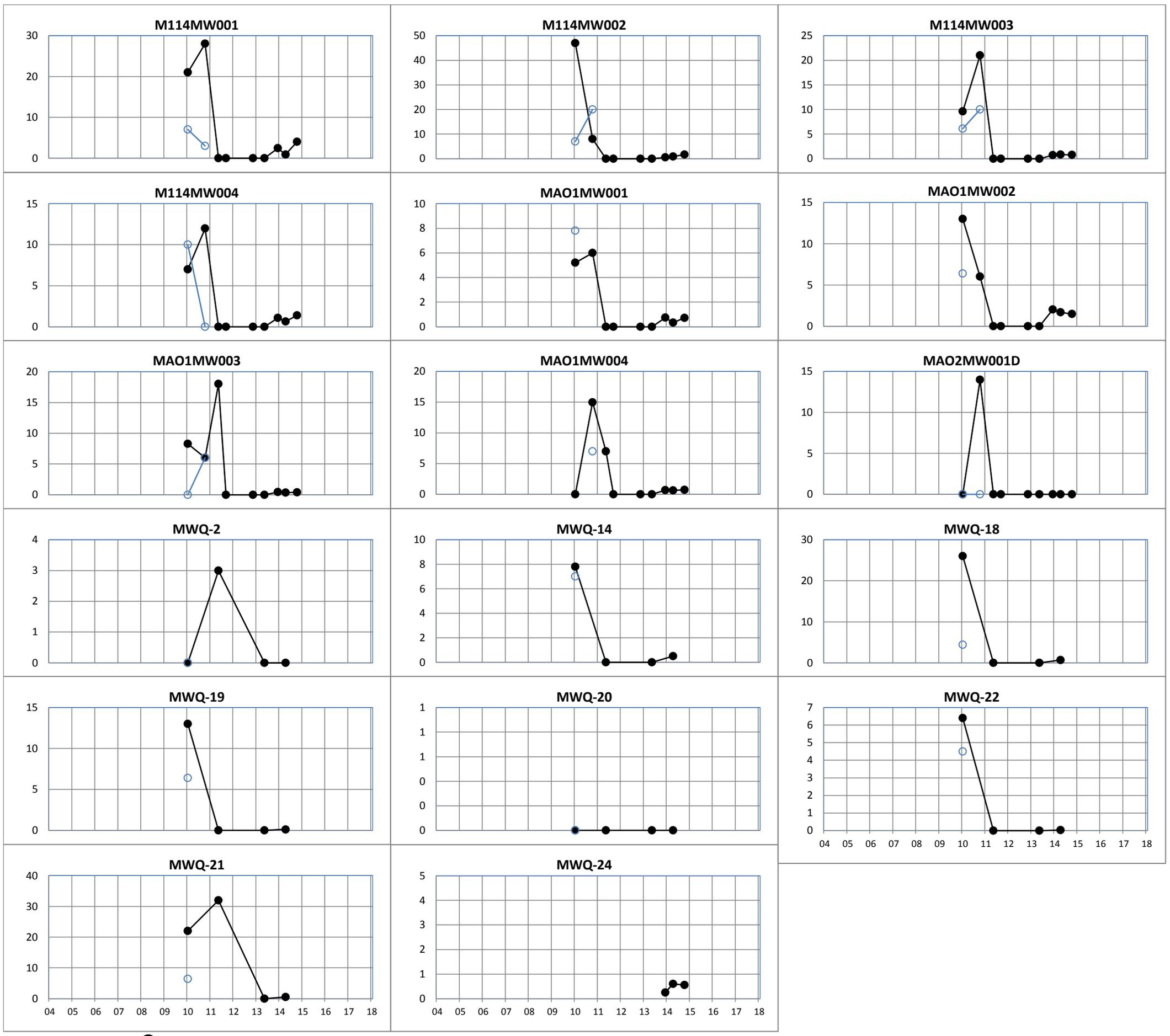


TABLE 6j
HEXAVALENT CHROMIUM

TABLE 6k
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

DATE	Semiannual Network																			
	SWMU 114								SWMU 130								SWMU 131			
	M114MW001		M114MW002		M114MW003		M114MW004		MAO1MW001		MAO1MW002		MAO1MW003		MAO1MW004		MAO2MW001D		MWQ-24	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04																				
Jul-04																				
Jul-05																				
Jun-07																				
Jan-09		6.3		5.9		5.7		5.8		2.7		2.3		2.2		1.9		33.8		
Jan-10	1.7	3.7	<D.L.	2.5	<D.L.	2.9	1.9	1.4	1.6	2.8	2.8	2.5	2.2	2.5	2.1	2.0	4.6	4.6		
Oct-10	14.1	<D.L.	19.5	24.2	17.3	20.0	12.7	12.6	11.6	12.3	9.8	9.7	14.5	13.2	9.0	8.5	16.4	17.1		
May-11	22.5	21.0	29.8	25.1	23.7	22.0	36.9	35.2	14.3	13.4	11.0	11.6	44.0	17.7	87.7	23.0	226.0	116.0		
Sep-11	15.8	15.6	13.8	15.8	13.3	15.1	13.8	17.6	10.6	11.7	10.2	10.6	13.7	12.7	8.2	9.6	25.3	23.8		
Nov-12	14.8	7.0	**1200.0**	500.0	11.8	10.0	8.6	5.1	11.7	10.7	13.3	9.0	11.6	11.6	**1330.0**	93.5	20.8	18.8		
May-13	26.2	27.0	27.7	22.0	24.6	20.3	24.4	20.2	20.2	18.1	17.5	17.7	22.9	27.3	21.7	18.7	24.6	21.5		
Dec-13	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	3.9	<D.L.	<D.L.	<D.L.
Apr-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	1.4	<D.L.	<D.L.	<D.L.	<D.L.	0.5	0.7	1.6	2.0	<D.L.	0.3
Oct-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	1.4	<D.L.	1.5	1.8	<D.L.	<D.L.	<D.L.	<D.L.
Min	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max	26.2	27.0	1200.0	500.0	24.6	22.0	36.9	35.2	20.2	18.1	17.5	17.7	44.0	27.3	1330.0	93.5	226.0	116.0	0.0	0.3
Avg	10.6	8.1	143.4	59.6	10.1	9.6	10.9	9.8	7.8	7.3	7.2	6.3	12.3	8.7	162.3	16.0	35.9	23.8	0.0	0.1

DATE	Annual Network													
	MWQ-2		MWQ-14		MWQ-18		MWQ-19		MWQ-20		MWQ-21		MWQ-22	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04		5.9		3.5										
Jul-04		5.2		3.9		0.9								
Jul-05		6.8		2.5		0.6				11.0		4.3		1.7
Jun-07		3.3		4.0		0.9				3.9		2.7		1.4
Jan-09		3.5		3.1		2.2		4.8		4.0		4.3		2.3
Jan-10	4.7	4.2	2.0	2.2	3.8	2.3	4.7	2.4	4.8	4.5	3.2	2.8	5.0	2.7
Oct-10														
May-11	23.9	22.2	16.1	14.5	**814.0**	554.0	20.1	18.0	23.2	21.3	15.0	13.3	7.7	7.0
Sep-11														
Nov-12														
May-13	25.8	19.1	18.2	16.8	10.0	10.1	30.0	17.9	40.0	16.6	13.6	10.9	15.5	9.9
Dec-13														
Apr-14	<D.L.	<D.L.	<D.L.	<D.L.	0.7	0.5	<D.L.	<D.L.	<D.L.	<D.L.	0.8	0.4	0.6	<D.L.
Oct-14														
Min	0.0	0.0	0.0	0.0	0.7	0.5	0.0	0.0	0.0	0.0	0.8	0.4	0.6	0.0
Max	25.8	22.2	18.2	16.8	814.0	554.0	30.0	18.0	40.0	21.3	15.0	13.3	15.5	9.9
Avg	13.6	7.8	9.1	5.6	207.1	71.4	13.7	8.6	17.0	8.8	8.2	5.5	7.2	3.6

Notes:

Data in µg/L

NMED SSL Tapwater Screening Level: 789.82 µg/L

Red indicates exceedance

Blank cells indicate no data

Wells MWQ-3, -4, -5, -6, -7, -10, -23, and MWL-6 not sampled after spring 2011

TABLE 6k
COPPER

TABLE 6k
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

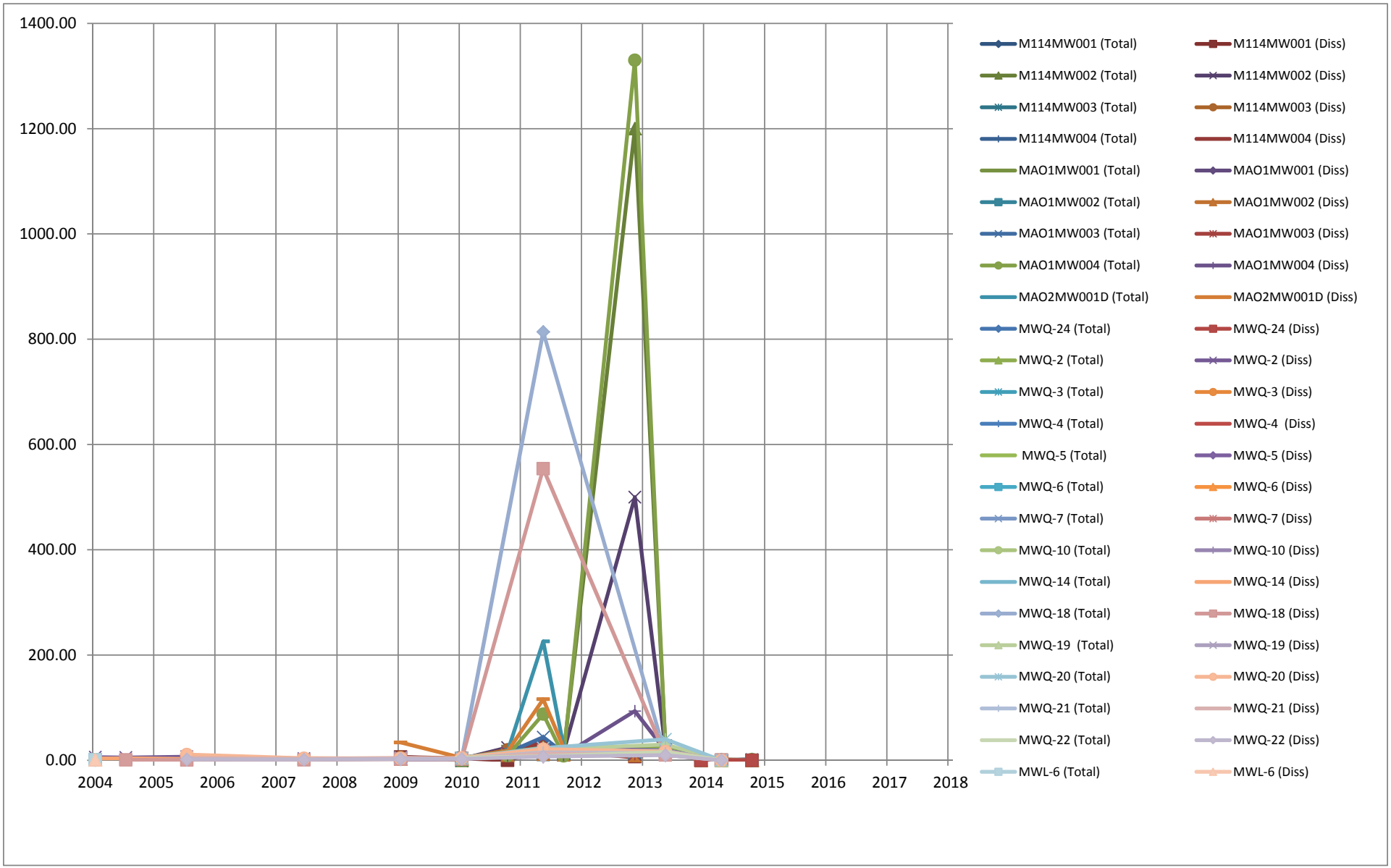
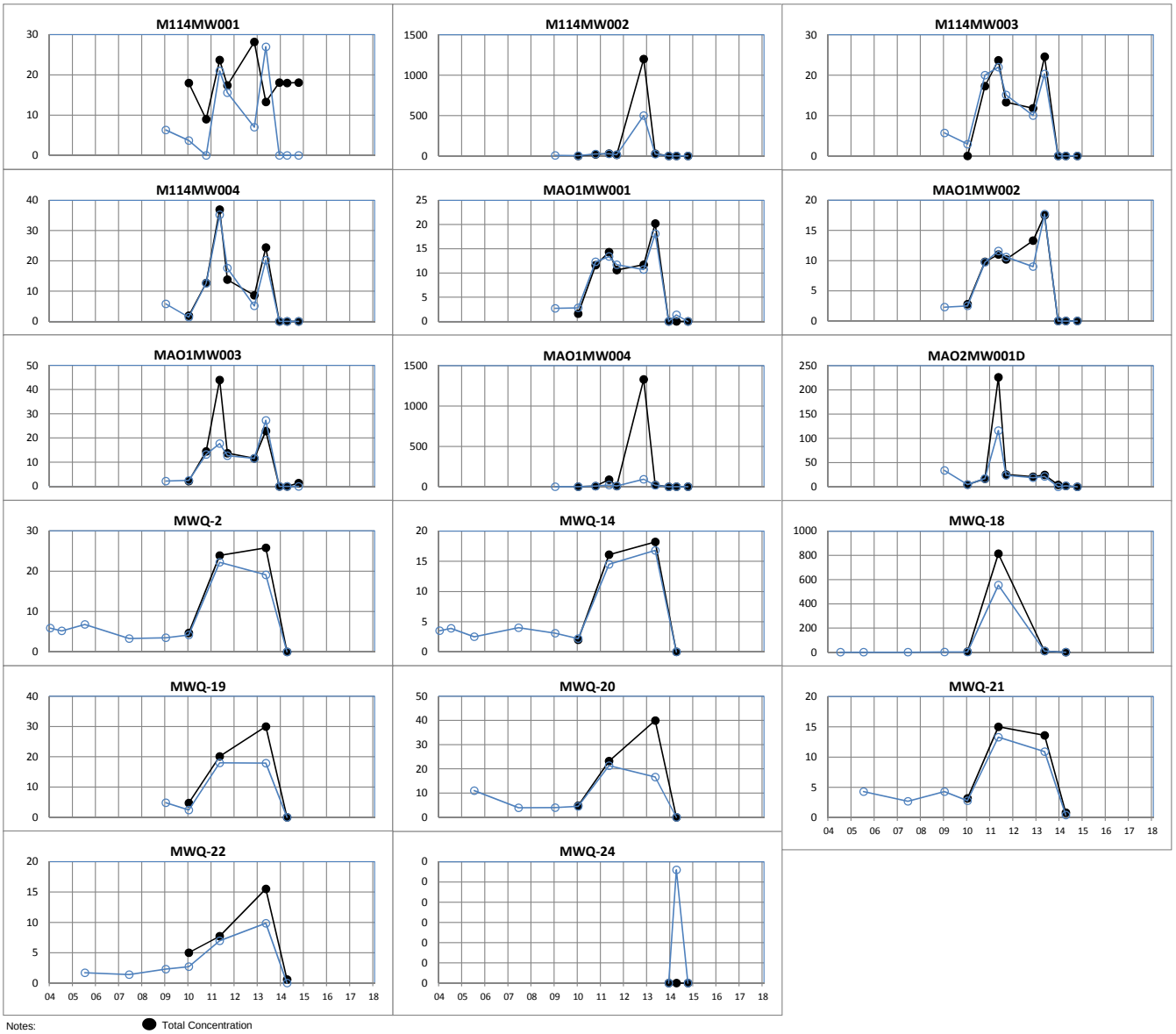


TABLE 6k
COPPER

TABLE 6k
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO



Notes:
Data in µg/L

Total Concentration
Dissolved Concentration

TABLE 6k
COPPER

TABLE 6l
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

DATE	Semiannual Network																			
	SWMU 114								SWMU 130								SWMU 131			
	M114MW001		M114MW002		M114MW003		M114MW004		MAO1MW001		MAO1MW002		MAO1MW003		MAO1MW004		MAO2MW001D		MWQ-24	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04																				
Jul-04																				
Jul-05																				
Jun-07																				
Jan-09																				
Jan-10	<D.L.	<D.L.	280	<D.L.	140	<D.L.	<D.L.		280		480	<D.L.	210	<D.L.	<D.L.	<D.L.	26	<D.L.		
Oct-10	<D.L.	<D.L.	337	<D.L.	82.6	<D.L.	<D.L.	<D.L.	102	65.2	38.5	<D.L.	274	57.9	179	39.2	<D.L.	<D.L.		
May-11	79.9	<D.L.	160	<D.L.	130	<D.L.	<D.L.	<D.L.	204	46.6	<D.L.	<D.L.	116	<D.L.	176	<D.L.	<D.L.	<D.L.		
Sep-11	47.1	<D.L.	60.5	<D.L.	162	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
Nov-12	511	<D.L.	193	<D.L.	1940	<D.L.	44	<D.L.	312	<D.L.	345	<D.L.	79.6	<D.L.	189	<D.L.	<D.L.	<D.L.		
May-13	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	126	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
Dec-13	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	27	<D.L.
Apr-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Oct-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	3590	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Min	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max	511.0	0.0	337.0	0.0	1940.0	3590.0	44.2	0.0	312.0	65.2	480.0	0.0	274.0	57.9	189.0	39.2	26.0	0.0	27.0	0.0
Avg	70.9	0.0	114.5	0.0	272.7	398.9	4.9	0.0	113.8	14.0	95.9	0.0	75.5	6.4	60.4	4.4	2.9	0.0	9.0	0.0

DATE	Annual Network													
	MWQ-2		MWQ-14		MWQ-18		MWQ-19		MWQ-20		MWQ-21		MWQ-22	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04														
Jul-04														
Jul-05														
Jun-07		38		43		36				56		<D.L.		150
Jan-09														
Jan-10	320	<D.L.	<D.L.	<D.L.	1900	<D.L.	2300	<D.L.	63	<D.L.	1400	<D.L.	850	<D.L.
Oct-10														
May-11	52.8	<D.L.	<D.L.	<D.L.	168	<D.L.	2820	2590	241	71.1	669	127	147	142
Sep-11														
Nov-12														
May-13	164	<D.L.	92.4	<D.L.	580	<D.L.	2340	1800	2500	<D.L.	1290	<D.L.	1250	131
Dec-13														
Apr-14	<D.L.	<D.L.	<D.L.	<D.L.	74.6	<D.L.	1360	1240	<D.L.	<D.L.	563	<D.L.	351	345
Oct-14														
Min	0.0	0.0	0.0	0.0	74.6	0.0	1360.0	0.0	0.0	0.0	563.0	0.0	147.0	0.0
Max	320.0	38.0	92.4	43.0	1900.0	36.0	2820.0	2590.0	2500.0	71.1	1400.0	127.0	1250.0	345.0
Avg	134.2	7.6	23.1	8.6	680.7	7.2	2205.0	1407.5	701.0	25.4	980.5	25.4	649.5	153.6

Notes:

Data in µg/L

NMED SSL Tapwater Screening Level: 13821.88 µg/l

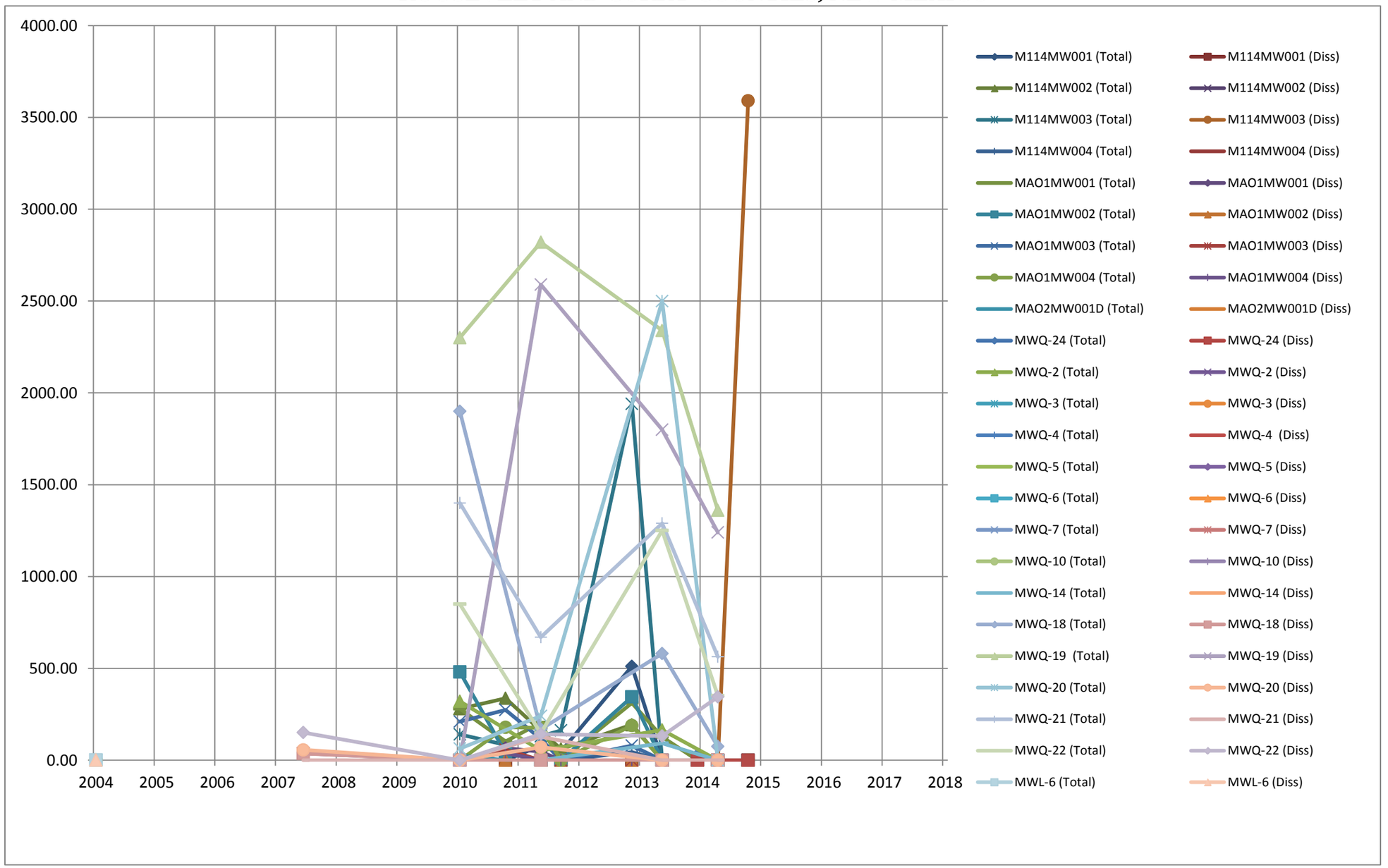
Red indicates exceedance

Blank cells indicate no data

Wells MWQ-3, -4, -5, -6, -7, -10, -23, and MWL-6 not sampled after spring 2011

TABLE 6l
IRON

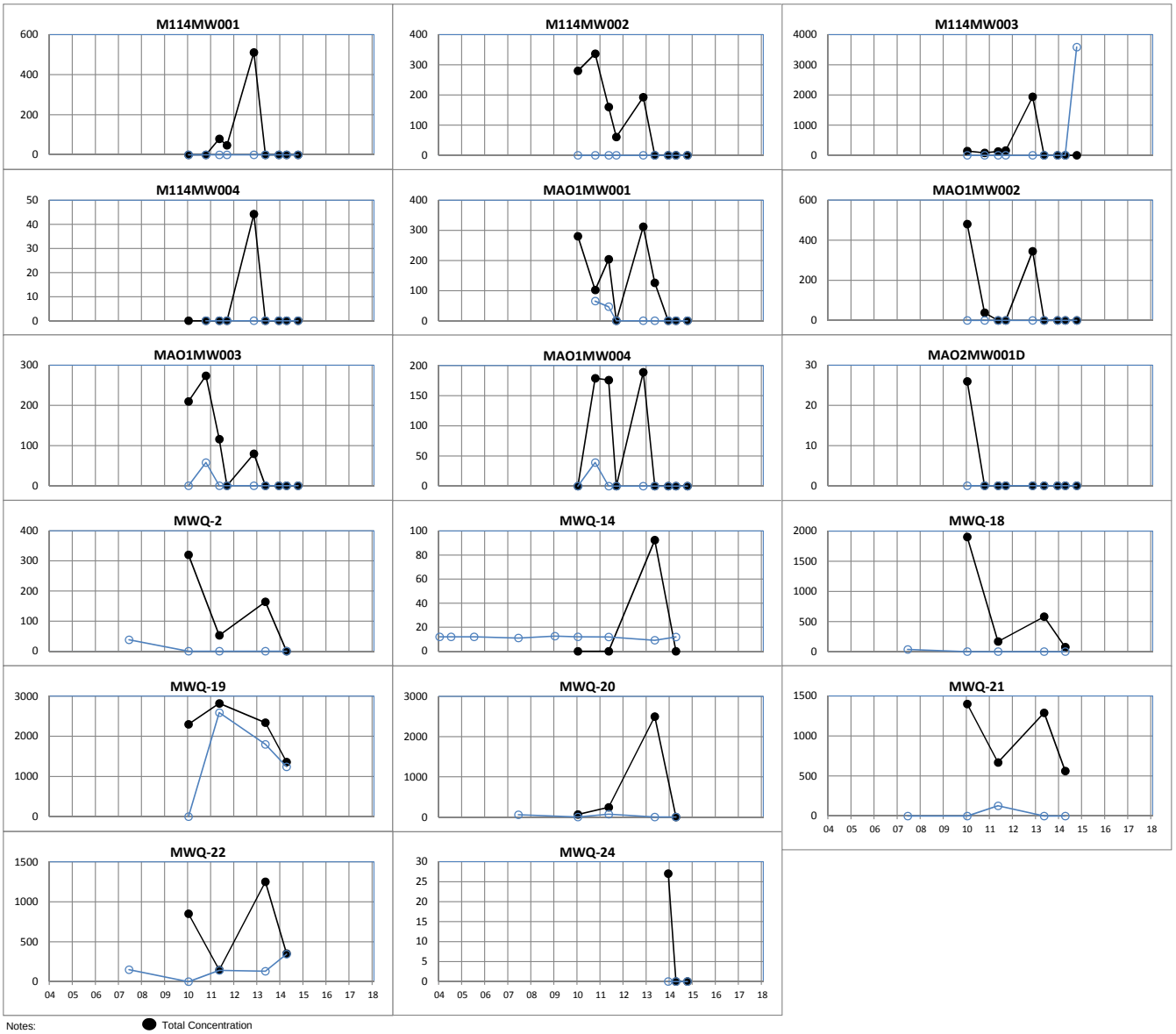
TABLE 6l
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO



L

TABLE 6l
IRON

TABLE 6l
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO



Notes:
Data in µg/L

Total Concentration
Dissolved Concentration

TABLE 6l
IRON

TABLE 6m
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

DATE	Semiannual Network																			
	SWMU 114								SWMU 130								SWMU 131			
	M114MW001		M114MW002		M114MW003		M114MW004		MAO1MW001		MAO1MW002		MAO1MW003		MAO1MW004		MAO2MW001D		MWQ-24	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04																				
Jul-04																				
Jul-05																				
Jun-07																				
Jan-09		0.11		<D.L.		<D.L.		<D.L.		0.32		0.11		0.15		0.13		0.13		
Jan-10	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
Oct-10	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
May-11	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	2.3	<D.L.	<D.L.	<D.L.		
Sep-11	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
Nov-12	<D.L.	<D.L.	<D.L.	<D.L.	2.55	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
May-13	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
Dec-13	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Apr-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Oct-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Min	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max	0.0	0.1	0.0	0.0	2.6	0.0	0.0	0.0	0.0	0.3	0.0	0.1	0.0	0.2	2.3	0.1	0.0	0.1	0.0	0.0
Avg	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0

DATE	Annual Network													
	MWQ-2		MWQ-14		MWQ-18		MWQ-19		MWQ-20		MWQ-21		MWQ-22	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04		<D.L.		<D.L.										
Jul-04		<D.L.		<D.L.		<D.L.								
Jul-05		<D.L.		0.5		0.44				0.6		0.54		0.56
Jun-07		<D.L.		<D.L.		0.21				0.20		<D.L.		0.21
Jan-09		0.11		<D.L.		1.40		0.31		0.16		0.23		<D.L.
Jan-10	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Oct-10														
May-11	<D.L.	<D.L.	<D.L.	<D.L.	1.79	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Sep-11														
Nov-12														
May-13	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Dec-13														
Apr-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	120	<D.L.	<D.L.	<D.L.	0.87	<D.L.	<D.L.	<D.L.
Oct-14														
Min	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max	0.0	0.1	0.0	0.5	1.8	1.4	120.0	0.3	0.0	0.6	0.9	0.5	0.0	0.6
Avg	0.0	0.0	0.0	0.1	0.4	0.3	30.0	0.1	0.0	0.1	0.2	0.1	0.0	0.1

Notes:

Data in µg/L

NMED SSL Tapwater Screening Level: N/A

Red indicates exceedance

Blank cells indicate no data

Wells MWQ-3, -4, -5, -6, -7, -10, -23, and MWL-6 not sampled after spring 2011

TABLE 6m
LEAD

TABLE 6m
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

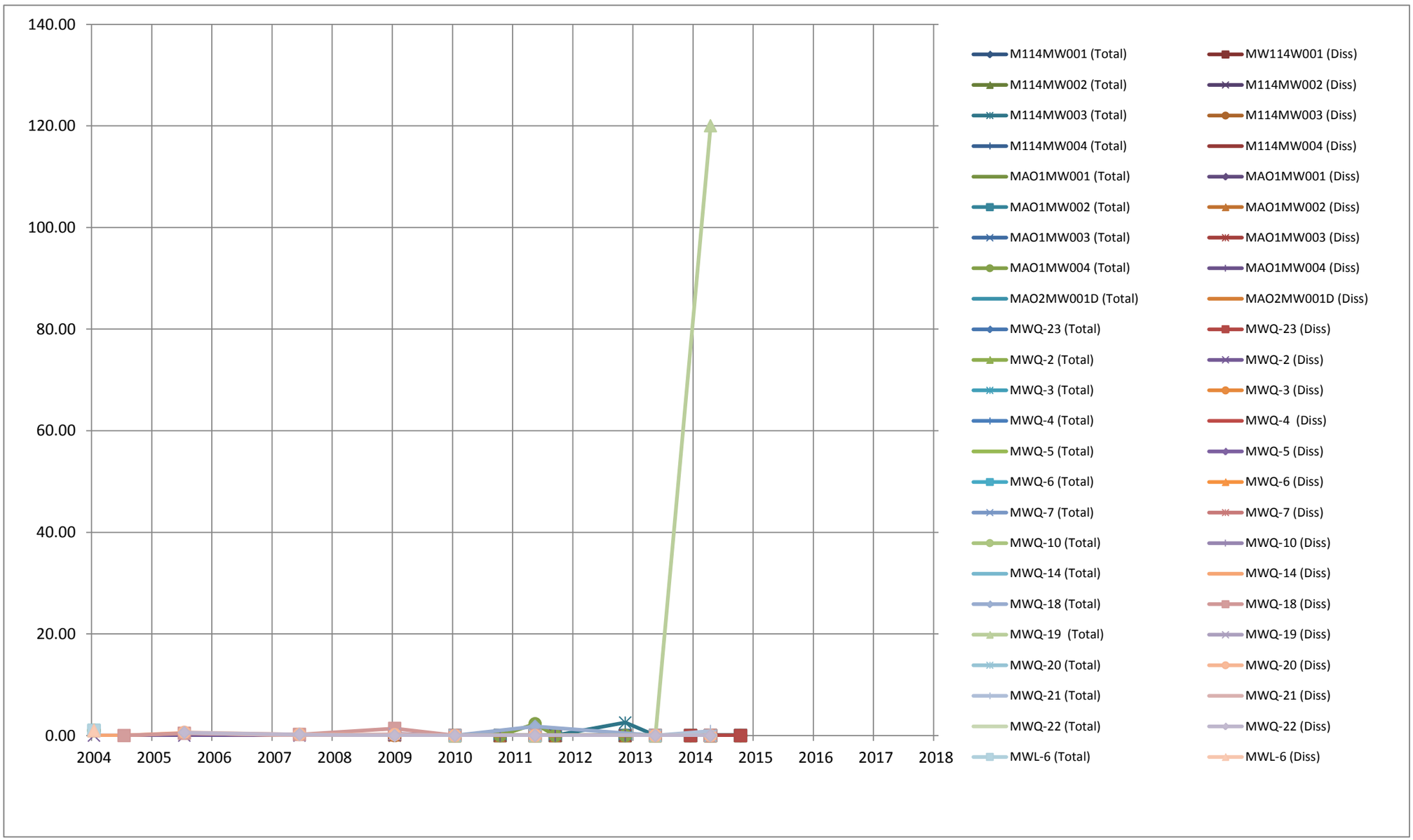


TABLE 6m
LEAD

TABLE 6m
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

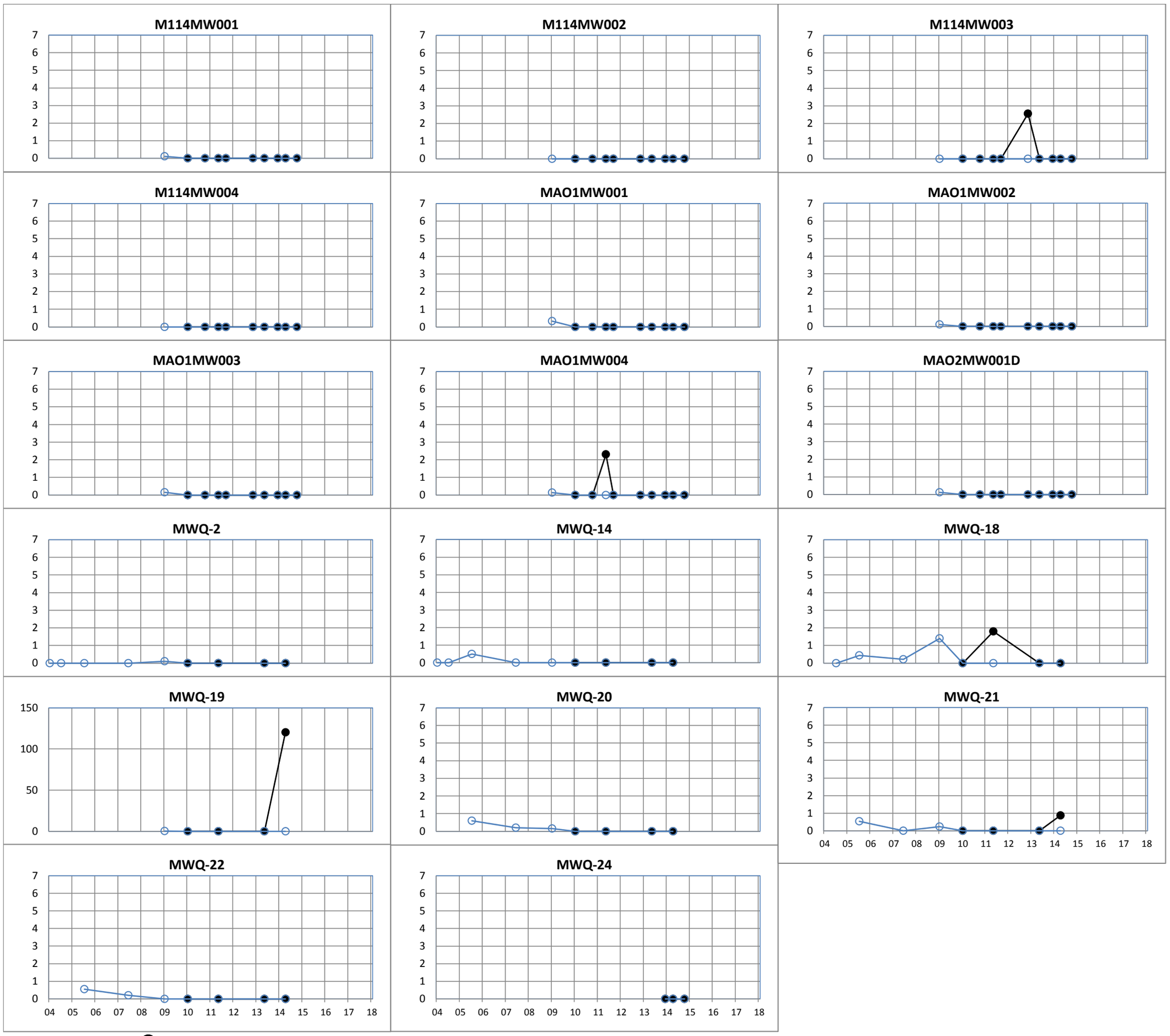


TABLE 6m
LEAD

TABLE 6n
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

DATE	Semiannual Network																			
	SWMU 114								SWMU 130								SWMU 131			
	M114MW001		M114MW002		M114MW003		M114MW004		MAO1MW001		MAO1MW002		MAO1MW003		MAO1MW004		MAO2MW001D		MWQ-24	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04																				
Jul-04																				
Jul-05																				
Jun-07																				
Jan-09		336,000		290,000		355,000		320,000		53,100		44,900		63,300		42,800		57,700		
Jan-10	260,000	260,000	280,000	250,000	290,000	290,000	320,000	300,000	48,000	44,000	36,000	35,000	60,000	59,000	38,000	39,000	80,000	73,000		
Oct-10	232,000	244,000	243,000	249,000	278,000	279,000	286,000	278,000	48,400	48,400	36,500	33,700	65,700	60,700	35,000	33,700	81,900	77,900		
May-11	239,000	250,000	238,000	244,000	270,000	271,000	285,000	295,000	48,700	50,100	34,200	36,700	63,400	60,300	36,600	35,000	71,800	73,500		
Sep-11	236,000	257,000	255,000	258,000	270,000	272,000	283,000	283,000	48,000	51,400	35,800	36,100	61,200	58,700	35,500	36,100	67,600	73,300		
Nov-12	241,000	227,000	243,000	253,000	276,000	261,000	283,000	314,000	46,900	48,800	37,900	33,700	60,100	61,900	34,900	32,500	64,300	62,400		
May-13	234,000	264,000	260,000	289,000	266,000	272,000	278,000	287,000	43,400	47,600	36,800	36,500	59,600	64,600	36,300	33,200	56,200	59,400		
Dec-13	286,000	280,000	299,000	295,000	296,000	284,000	314,000	323,000	47,000	44,300	38,600	37,200	63,400	62,000	39,400	35,900	66,500	61,500	25,800	22,500
Apr-14	294,000	277,000	288,000	275,000	299,000	277,000	328,000	311,000	45,100	43,100	37,800	34,600	61,600	62,200	37,200	34,400	65,400	57,200	22,500	21,700
Oct-14	242,000	283,000	264,000	313,000	293,000	328,000	316,000	358,000	45,800	40,700	37,400	36,800	64,100	62,300	35,300	34,800	50,000	55,300	21,000	23,600
Min	232000	227000	238000	244000	266000	261000	278000	278000	43400	40700	34200	33700	59600	58700	34900	32500	50000	55300	21000	21700
Max	294000	336000	299000	313000	299000	355000	328000	358000	48700	53100	38600	44900	65700	64600	39400	42800	81900	77900	25800	23600
Avg	251556	267800	263333	271600	282000	288900	299222	306900	46811	47150	36778	36520	62122	61500	36467	35740	67078	65120	23100	22600

DATE	Annual Network													
	MWQ-2		MWQ-14		MWQ-18		MWQ-19		MWQ-20		MWQ-21		MWQ-22	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04		120,000		68,000										
Jul-04		130,000		64,000		20,000								
Jul-05		130,000		64,000		20,000				250,000		85,000		13,000
Jun-07		120,000		72,000		19,000				330,000		77,000		15,000
Jan-09		136,000		68,300		18,200		224,000		362,000		75,100		22,400
Jan-10	130,000	140,000	67,000	66,000	21,000	20,000	210,000	210,000	310,000	310,000	64,000	65,000	26,000	27,000
Oct-10														
May-11	124,000	135,000	61,800	62,400	18,700	20,200	188,000	188,000	311,000	306,000	57,600	57,700	16,200	17,400
Sep-11														
Nov-12														
May-13	122,000	119,000	61,000	57,700	21,500	19,300	197,000	181,000	305,000	290,000	56,900	45,600	31,000	29,000
Dec-13														
Apr-14	132,000	134,000	70,400	65,300	19,900	20,000	185,000	186,000	383,000	348,000	41,600	48,100	21,800	20,400
Oct-14														
Min	122000	119000	61000	57700	18700	18200	185000	181000	305000	250000	41600	45600	16200	13000
Max	132000	140000	70400	72000	21500	20200	210000	224000	383000	362000	64000	85000	31000	29000
Avg	127000	129333	65050	65300	20275	19588	195000	197800	327250	313714	55025	64786	23750	20600

Notes:
Data in µg/L
NMED SSL Tapwater Screening Level: N/A
Red indicates exceedance
Blank cells indicate no data
Wells MWQ-3, -4, -5, -6, -7, -10, -23, and MWL-6 not sampled after spring 2011

TABLE 6n
MAGNESIUM

TABLE 6n
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

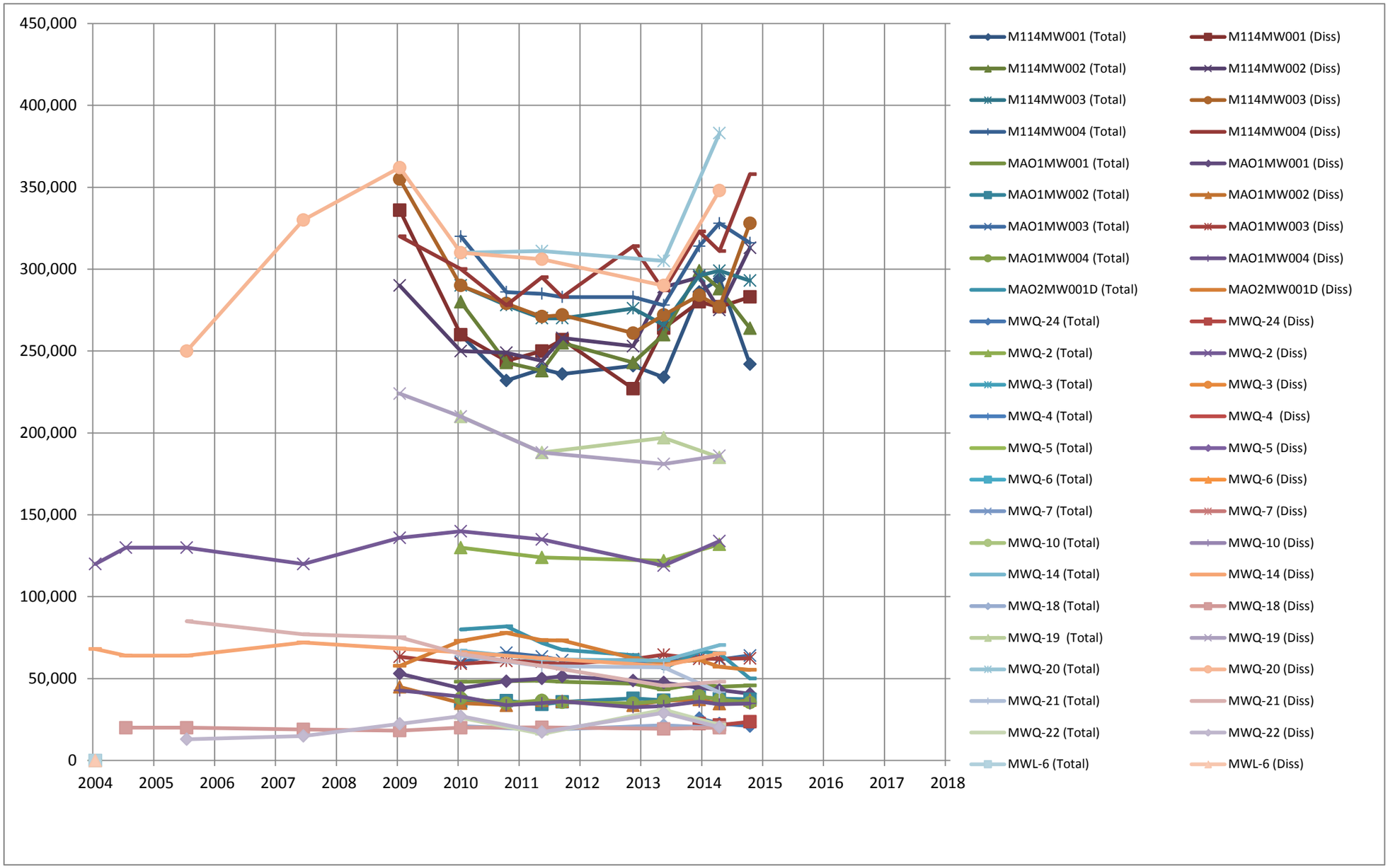
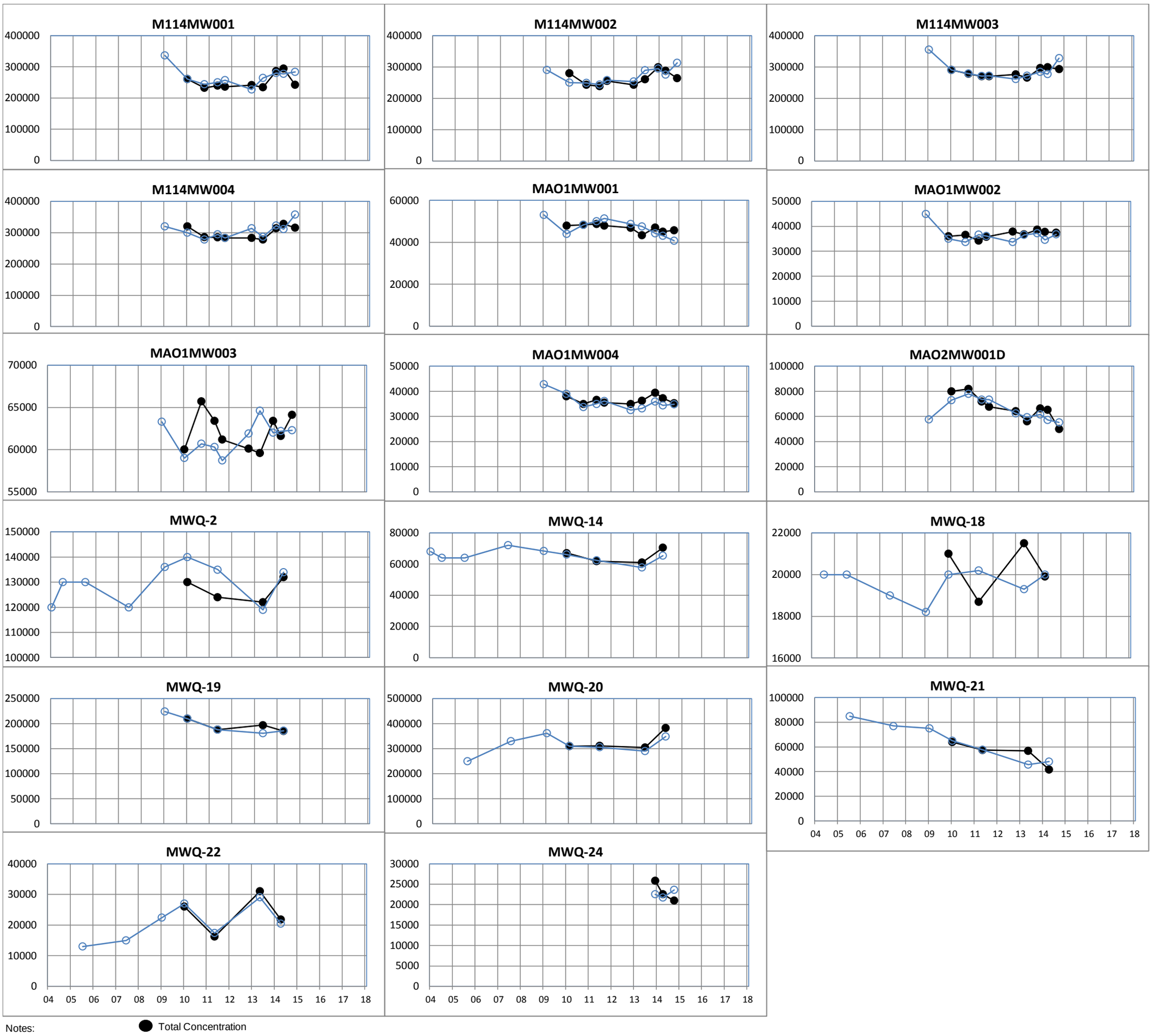


TABLE 6n
MAGNESIUM

TABLE 6n
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO



Notes:

Data in µg/L

TABLE 6n
MAGNESIUM

TABLE 6o
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

DATE	Semiannual Network																			
	SWMU 114								SWMU 130								SWMU 131			
	M114MW001		M114MW002		M114MW003		M114MW004		MAO1MW001		MAO1MW002		MAO1MW003		MAO1MW004		MAO2MW001D		MWQ-24	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04																				
Jul-04																				
Jul-05																				
Jun-07																				
Jan-09		18.80		2.50		16.40		44.30		5.10		0.84		0.67		1.20		158		
Jan-10	0.54	0.35	16	0.67	3.1	0.39	0.72	0.36	13	0.47	28	0.26	13	<D.L.	1.6	0.85	77	65		
Oct-10	1.27	<D.L.	25.5	8.84	2.52	2.31	<D.L.	<D.L.	9.19	3.98	2.64	<D.L.	14.2	6.08	7.45	1.31	72.3	48.6		
May-11	4.1	<D.L.	9.2	<D.L.	7.8	<D.L.	5.27	3.1	12.6	2.16	2.76	<D.L.	7.9	<D.L.	6.88	2.26	248	208		
Sep-11	<D.L.	<D.L.	3.1	<D.L.	6.87	<D.L.	3.49	<D.L.	5.7	<D.L.	5.45	<D.L.	10.2	8.2	6.56	5.8	209	188		
Nov-12	33.5	7.45	4.73	<D.L.	56.7	<D.L.	<D.L.	<D.L.	9.26	<D.L.	17.5	8.05	<D.L.	<D.L.	25.7	<D.L.	214	193		
May-13	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	7.46	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	4.0	4.38	188	185		
Dec-13	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	159	150	14.70	8.89
Apr-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	7.52	<D.L.	<D.L.	<D.L.	<D.L.	191	177	<D.L.	<D.L.
Oct-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	180	190	<D.L.	<D.L.
Min	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	72.3	48.6	0.0	0.0
Max	33.5	18.8	25.5	8.8	56.7	16.4	5.3	44.3	13.0	5.1	28.0	8.1	14.2	8.2	25.7	5.8	248.0	208.0	14.7	8.9
Avg	4.4	2.7	6.5	1.2	8.6	1.9	1.1	4.8	6.4	1.2	6.3	1.7	5.0	1.5	5.8	1.6	170.9	156.3	4.9	3.0

DATE	Annual Network													
	MWQ-2		MWQ-14		MWQ-18		MWQ-19		MWQ-20		MWQ-21		MWQ-22	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04		410.0		0.9										
Jul-04		330.0		0.9		<D.L.								
Jul-05		420.0		1.2		0.6				550.0		1.1		71.0
Jun-07		350.0		0.6		0.4				900.0		0.7		410.0
Jan-09		458.0		0.7		0.5		472.0		886.0		3.8		201.0
Jan-10	420.0	430.0	0.8	<D.L.	40.0	1.3	450.0	450.0	770.0	760.0	37.0	2.6	150.0	150.0
Oct-10														
May-11	82.9	50.1	13.8	<D.L.	5.3	9.3	436.0	432.0	967.0	934.0	19.9	<D.L.	426.0	440.0
Sep-11														
Nov-12														
May-13	361.0	338.0	5.4	<D.L.	8.4	<D.L.	432.0	452.0	1,010.0	971.0	23.0	<D.L.	110.0	91.9
Dec-13														
Apr-14	194.0	194.0	<D.L.	<D.L.	2.7	<D.L.	383.0	364.0	975.0	888.0	15.3	<D.L.	152.0	148.0
Oct-14														
Min	82.9	50.1	0.0	0.0	2.7	0.0	383.0	364.0	770.0	550.0	15.3	0.0	110.0	71.0
Max	420.0	458.0	13.8	1.2	40.0	9.3	450.0	472.0	1010.0	971.0	37.0	3.8	426.0	440.0
Avg	264.5	331.1	5.0	0.5	14.1	1.5	425.3	434.0	930.5	841.3	23.8	1.2	209.5	216.0

Notes:

Data in µg/L

NMED SSL Tapwater Screening Level: 2017.4 µg/L

Red indicates exceedance

Blank cells indicate no data

Wells MWQ-3, -4, -5, -6, -7, -10, -23, and MWL-6 not sampled after spring 2011

TABLE 6o
MANGANESE

TABLE 6o
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

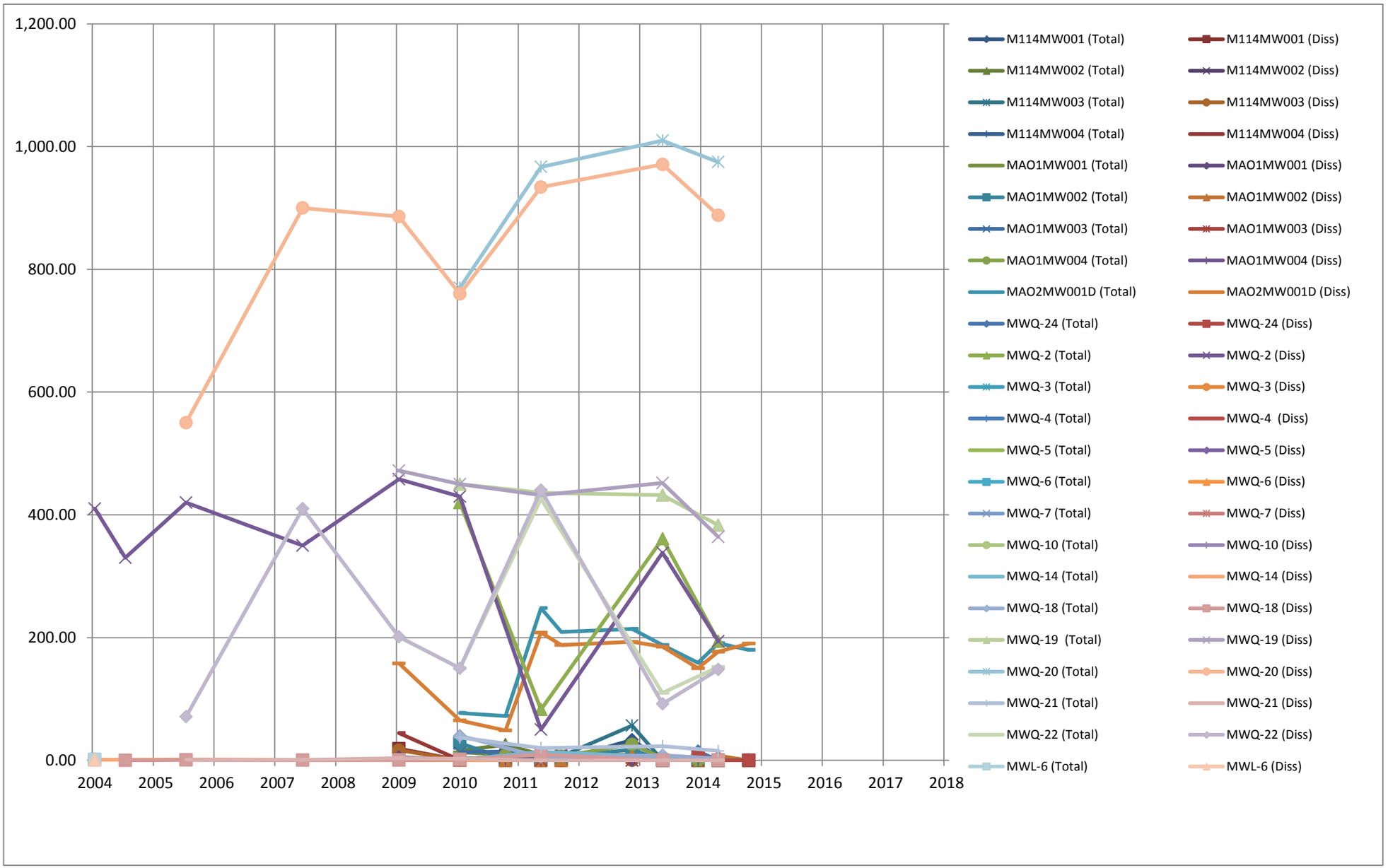


TABLE 6o
MANGANESE

TABLE 6o
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

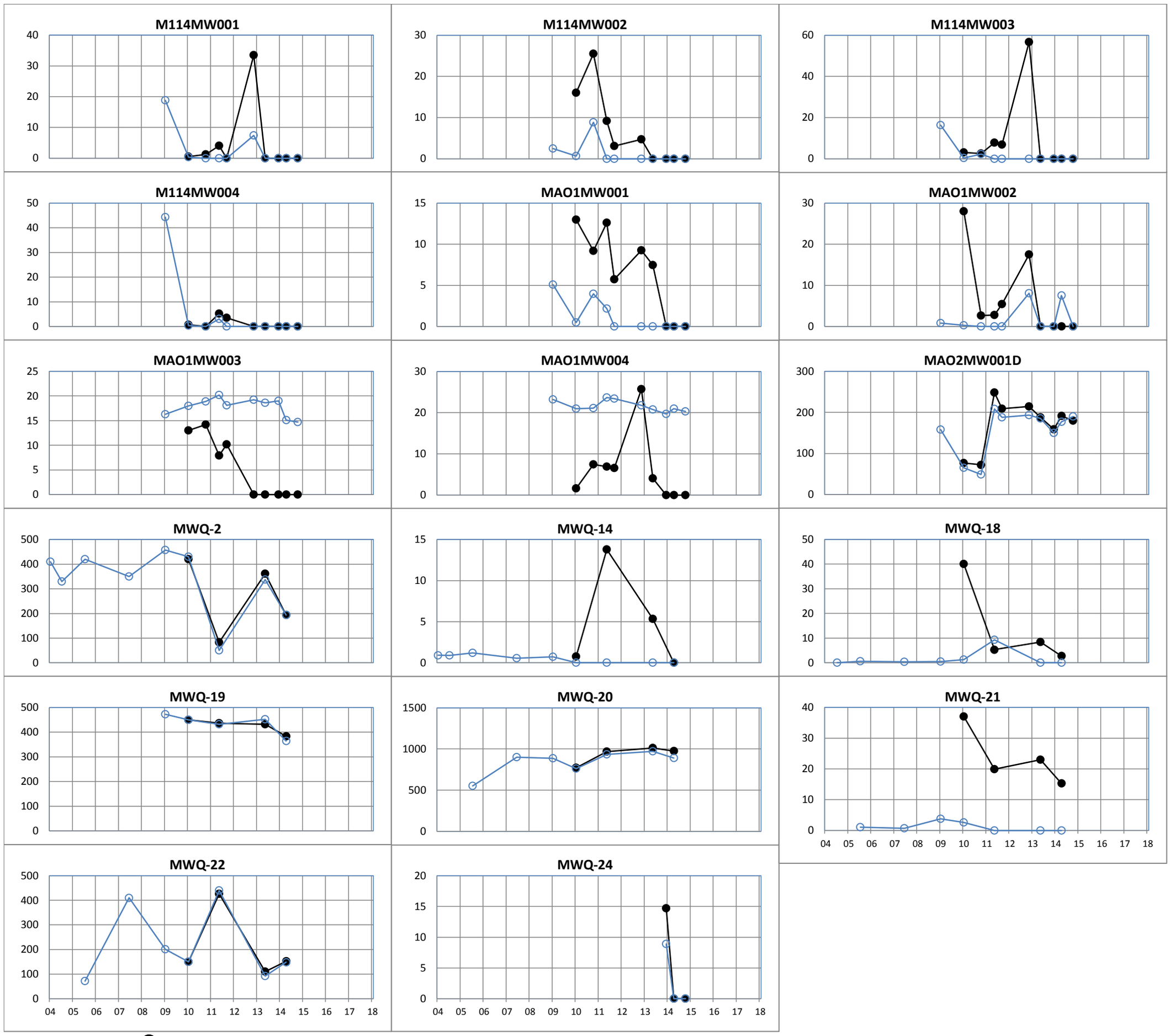


TABLE 6o
MANGANESE

TABLE 6p
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

DATE	Semiannual Network																			
	SWMU 114								SWMU 130								SWMU 131			
	M114MW001		M114MW002		M114MW003		M114MW004		MAO1MW001		MAO1MW002		MAO1MW003		MAO1MW004		MAO2MW001D		MWQ-24	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04																				
Jul-04																				
Jul-05																				
Jun-07																				
Jan-09		0.08		0.11		<D.L.		0.09		<D.L.		0.098		<D.L.		0.16		0.06		
Jan-10	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	0.03	0.034	0.048	0.033	0.034	0.035	0.035	0.033	0.035	0.036	<D.L.	<D.L.		
Oct-10	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
May-11	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
Sep-11	<D.L.	0.08165	0.10199	<D.L.	<D.L.	0.09168	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	0.09305	0.09518	<D.L.	0.08023	0.08433	<D.L.	<D.L.		
Nov-12	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
May-13	0.10249	0.15019	0.2209	0.10878	0.06886	<D.L.	<D.L.	<D.L.	<D.L.	0.18992	**0.8507**	**0.6392**	0.09401	<D.L.	0.17031	0.24663	<D.L.	<D.L.		
Dec-13	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Apr-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Oct-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Max	0.10	0.15	0.22	0.11	0.07	0.09	0.03	0.09	0.05	0.19	0.85	0.64	0.10	0.03	0.17	0.25	0.00	0.06	0.00	0.00
Avg	0.01	0.03	0.04	0.02	0.01	0.01	0.00	0.01	0.01	0.02	0.10	0.09	0.02	0.00	0.03	0.05	0.00	0.01	0.00	0.00

DATE	Annual Network													
	MWQ-2		MWQ-14		MWQ-18		MWQ-19		MWQ-20		MWQ-21		MWQ-22	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04		<D.L.		<D.L.										
Jul-04		0.11		0.078		0.0690								
Jul-05														
Jun-07														
Jan-09		0.130		<D.L.		<D.L.		<D.L.		<D.L.		<D.L.		<D.L.
Jan-10	<D.L.	<D.L.	<D.L.	<D.L.	0.035	0.035	0.036	0.035	0.035	0.035	<D.L.	<D.L.	<D.L.	<D.L.
Oct-10														
May-11	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Sep-11														
Nov-12														
May-13	<D.L.	<D.L.	0.854	1.35	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	0.925	0.7532
Dec-13														
Apr-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Oct-14														
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Max	0.00	0.13	0.85	1.35	0.04	0.07	0.04	0.04	0.04	0.04	0.00	0.00	0.93	0.75
Avg	0.00	0.03	0.21	0.20	0.01	0.02	0.01	0.01	0.01	0.01	0.00	0.00	0.23	0.15

Notes:

Data in µg/L

NMED SSL Tapwater Screening Level: 0.63 µg/L

Red indicates exceedance

Blank cells indicate no data

Wells MWQ-3, -4, -5, -6, -7, -10, -23, and MWL-6 not sampled after spring 2011

Due to a preponderance of no detects trends are not plotted

TABLE 6p
MERCURY

TABLE 6q
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

DATE	Semiannual Network																			
	SWMU 114								SWMU 130								SWMU 131			
	M114MW001		M114MW002		M114MW003		M114MW004		MAO1MW001		MAO1MW002		MAO1MW003		MAO1MW004		MAO2MW001D		MWQ-24	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04																				
Jul-04																				
Jul-05																				
Jun-07																				
Jan-09		12.2		15.8		8.2		10.0		5.7		11.4		4.0		6.0		23.6		
Jan-10	16	16	18	18	13	13	13	12	7.6	6.9	8.4	7.8	4.7	4.8	6.1	6.0	15	13		
Oct-10	24.2	25.9	19.6	<D.L.	8.47	8.67	22.7	22.1	3.77	4.66	5.47	6.77	4.20	4.49	4.65	5.64	13.0	12.5		
May-11	16.9	17.9	20.5	20.5	8.07	8.48	12.5	13	4.94	5.66	7.44	8.79	4.39	4.09	7.31	6.27	18.1	17.5		
Sep-11	17.8	18.8	23.7	22.1	9.56	8.6	13.1	13.3	4.42	4.61	5.93	6.66	<D.L.	<D.L.	4.78	5.07	14	15.2		
Nov-12	18.9	19.1	30.4	27.6	12.9	11	14.2	15.7	5.74	6.51	7.7	7.09	5.45	5.53	19.7	11.2	17.8	16.2		
May-13	12.9	13.2	13.5	12.5	8.54	9.54	12.3	12.7	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	15.6	15.4		
Dec-13	14.9	14.3	12.5	12.7	7.83	7.56	12.4	11.8	5.70	5.77	7.12	6.73	4.28	4.68	6.00	5.30	18.9	18.6	10.8	9.88
Apr-14	11	11.8	12.9	14.5	7.88	7.79	11.9	10.9	5.28	5.31	6.78	6.67	3.57	3.55	5.68	5.73	20.2	18.5	15.1	14
Oct-14	16.1	15.1	14.1	15.7	7.73	8.12	10.5	11.5	5.63	5.44	6.40	6.67	3.93	3.98	5.59	5.52	16.8	18.7	9.5	9.93
Min	11.0	11.8	12.5	0.0	7.7	7.6	10.5	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.0	12.5	9.5	9.9
Max	24.2	25.9	30.4	27.6	13.0	13.0	22.7	22.1	7.6	6.9	8.4	11.4	5.5	5.5	19.7	11.2	20.2	23.6	15.1	14.0
Avg	16.5	16.4	18.4	15.9	9.3	9.1	13.6	13.3	4.8	5.1	6.1	6.9	3.4	3.5	6.6	5.7	16.6	16.9	11.8	11.3

DATE	Annual Network													
	MWQ-2		MWQ-14		MWQ-18		MWQ-19		MWQ-20		MWQ-21		MWQ-22	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04		32		26										
Jul-04		21		26		5								
Jul-05		25		29		4.9				16		9.3		9.4
Jun-07		26.0		28		5.0				16.0		8.8		9.0
Jan-09		22.8		29.8		4.5		0.4		14.1		8.8		57.9
Jan-10	21	23	29	28	4.6	4.5	<D.L.	<D.L.	15	14	8.8	8.8	47	52
Oct-10														
May-11	20.6	22.6	25.4	26	16.4	11.6	<D.L.	<D.L.	17	16.4	9.63	9.72	11.1	12
Sep-11														
Nov-12														
May-13	23.5	21.9	24.8	23.4	<D.L.	<D.L.	<D.L.	<D.L.	16.9	18.8	9.85	9.46	47.8	46.6
Dec-13														
Apr-14	20.5	19.5	26.6	24.1	4.52	4.47	4.33	1.3	13	12.6	9.79	11.2	13.2	12.8
Oct-14														
Min	20.5	19.5	24.8	23.4	0.0	0.0	0.0	0.0	13.0	12.6	8.8	8.8	11.1	9.0
Max	23.5	32.0	29.0	29.8	16.4	11.6	4.3	1.3	17.0	18.8	9.9	11.2	47.8	57.9
Avg	21.4	23.8	26.5	26.7	6.4	5.0	1.1	0.3	15.5	15.4	9.5	9.4	29.8	28.5

Notes:

Data in µg/L

NMED SSL Tapwater Screening Level: 98.73. µg/L

Red indicates exceedance

Blank cells indicate no data

Wells MWQ-3, -4, -5, -6, -7, -10, -23, and MWL-6 not sampled after spring 2011

TABLE 6q
MOLYBENUM

TABLE 6q
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

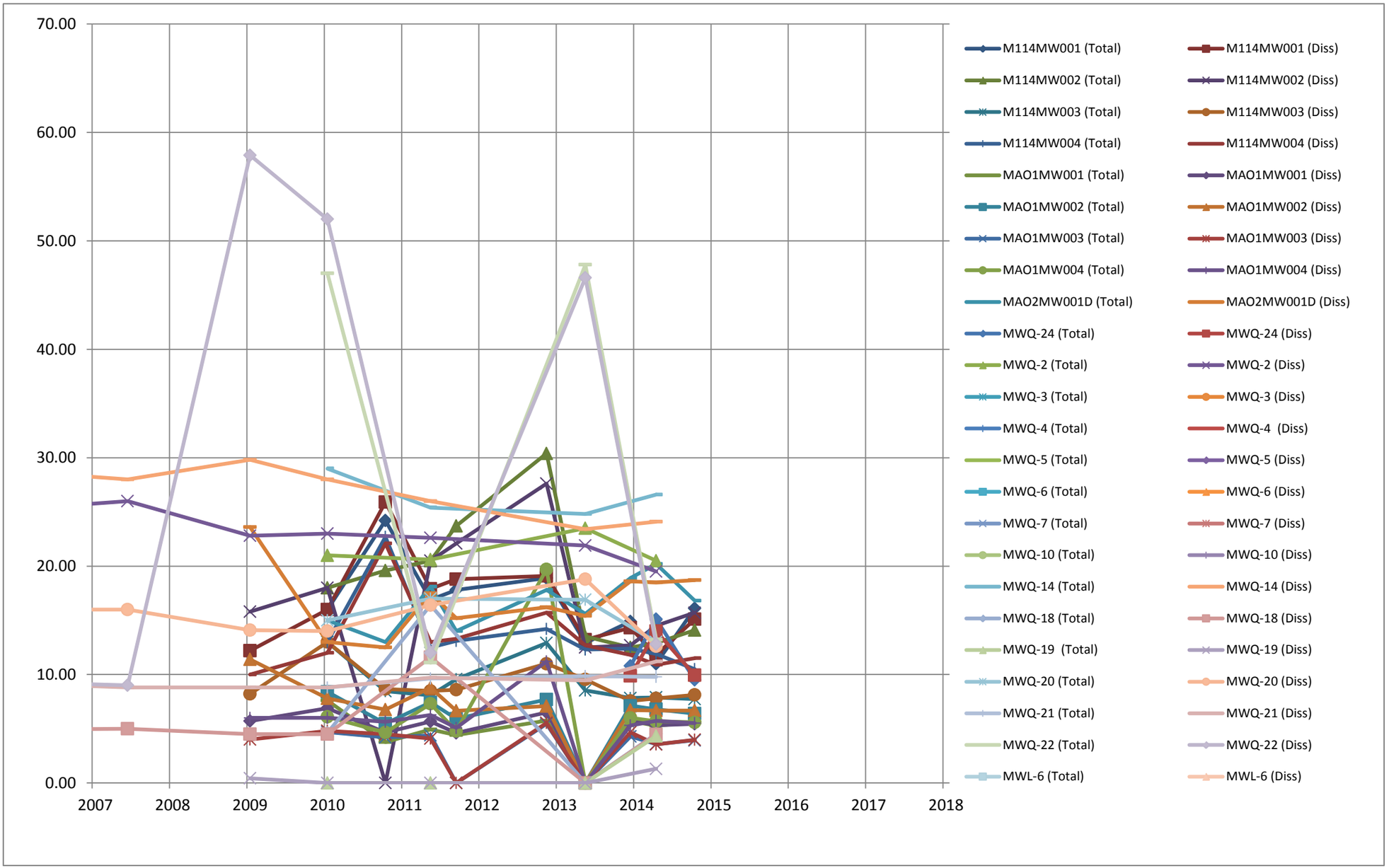
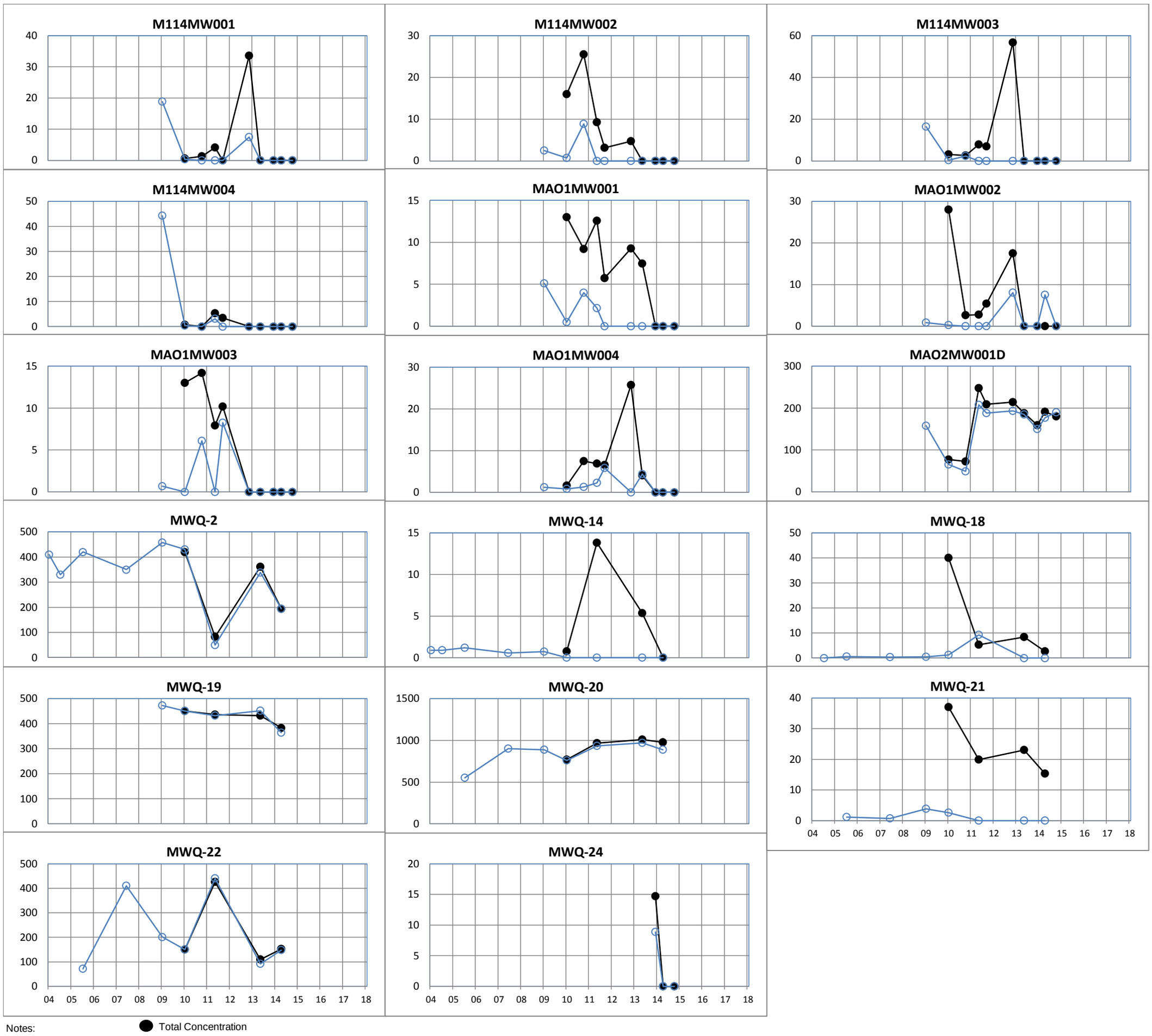


TABLE 6q
MOLYBENUM

TABLE 6q
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO



Notes:

Data in µg/L

TABLE 6q
MOLYBENUM

TABLE 6r
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

DATE	Semiannual Network																			
	SWMU 114								SWMU 130								SWMU 131			
	M114MW001		M114MW002		M114MW003		M114MW004		MAO1MW001		MAO1MW002		MAO1MW003		MAO1MW004		MAO2MW001D		MWQ-24	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04																				
Jul-04																				
Jul-05																				
Jun-07																				
Jan-09		16,800		15,400		16,600		15,700		7,230		7,530		7,790		6,410		12,500		
Jan-10	19,000	18,000	17,000	17,000	18,000	18,000	21,000	20,000	7,600	6,900	7,100	6,700	8,300	8,000	6,400	6,400	11,000	9,300		
Oct-10	16,600	17,900	19,500	20,300	22,600	22,100	18,200	17,500	8,040	8,320	6,990	6,820	9,620	8,320	5,960	5,810	12,300	11,600		
May-11	18,500	19,300	18,200	18,200	19,800	19,700	20,300	20,600	7,780	7,880	6,860	7,280	8,970	8,430	6,610	6,400	10,400	10,300		
Sep-11	16,400	17,700	16,500	16,800	17,000	17,400	17,100	18,300	7,120	7,670	6,640	6,710	7,750	7,620	6,040	6,150	8,540	9,280		
Nov-12	18,900	17,500	17,900	19,200	20,500	19,200	19,000	21,200	8,680	7,870	7,440	6,770	8,440	8,450	6,040	5,950	9,780	9,460		
May-13	18,000	16,900	18,900	17,900	19,700	18,100	19,600	19,800	7,570	7,620	7,170	7,350	8,410	9,070	6,460	6,000	8,680	9,380		
Dec-13	15,800	14,800	15,300	14,800	16,700	14,400	15,900	15,600	6,650	6,360	6,360	6,190	7,680	7,550	6,000	5,540	7,640	7,380	4,650	4,420
Apr-14	14,700	15,100	14,500	14,700	14,600	14,600	16,300	15,300	6,170	6,060	6,300	5,830	6,970	7,110	5,550	5,540	7,650	6,900	4,750	4,610
Oct-14	13,900	13,200	14,500	14,400	14,700	14,800	15,300	15,600	6,330	5,740	5,960	6,020	7,180	6,960	5,530	5,740	6,260	7,170	3,930	4,420
Min	13900	13200	14500	14400	14600	14400	15300	15300	6170	5740	5960	5830	6970	6960	5530	5540	6260	6900	3930	4420
Max	19000	19300	19500	20300	22600	22100	21000	21200	8680	8320	7440	7530	9620	9070	6610	6410	12300	12500	4750	4610
Avg	16867	16720	16922	16870	18178	17490	18078	17960	7327	7165	6758	6720	8147	7930	6066	5994	9139	9327	4443	4483

DATE	Annual Network													
	MWQ-2		MWQ-14		MWQ-18		MWQ-19		MWQ-20		MWQ-21		MWQ-22	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04		9,400		11,000										
Jul-04		9,300		11,000		3,000								
Jul-05		10,000		11,000		3,100				13,000		12,000		3,200
Jun-07		9,800		12,000		2,700				15,000		11,000		3,100
Jan-09		9,390		11,500		2,430		10,100		13,300		10,600		3,520
Jan-10	9,900	10,000	12,000	13,000	3,600	2,800	11,000	11,000	15,000	14,000	11,000	10,000	4,500	4,600
Oct-10														
May-11	11,600	12,600	11,400	11,400	2,770	2,870	10,400	10,400	16,200	15,700	10,300	9,970	3,260	3,340
Sep-11														
Nov-12														
May-13	10,400	10,800	11,300	11,200	3,130	2,820	10,800	10,700	16,500	15,600	10,500	9,200	5,090	4,630
Dec-13														
Apr-14	8,560	8,520	11,800	10,800	2,700	2,700	9,450	8,960	12,800	11,500	7,600	8,510	3,130	3,080
Oct-14														
Min	8560	8520	11300	10800	2700	2430	9450	8960	12800	11500	7600	8510	3130	3080
Max	11600	12600	12000	13000	3600	3100	11000	11000	16500	15700	11000	12000	5090	4630
Avg	10115	9979	11625	11433	3050	2803	10413	10232	15125	14014	9850	10183	3995	3639

Notes:

Data in µg/L

NMED SSL Tapwater Screening Level: N/A

Red indicates exceedance

Blank cells indicate no data

Wells MWQ-3, -4, -5, -6, -7, -10, -23, and MWL-6 not sampled after spring 2011

TABLE 6r
POTASSIUM

TABLE 6r
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

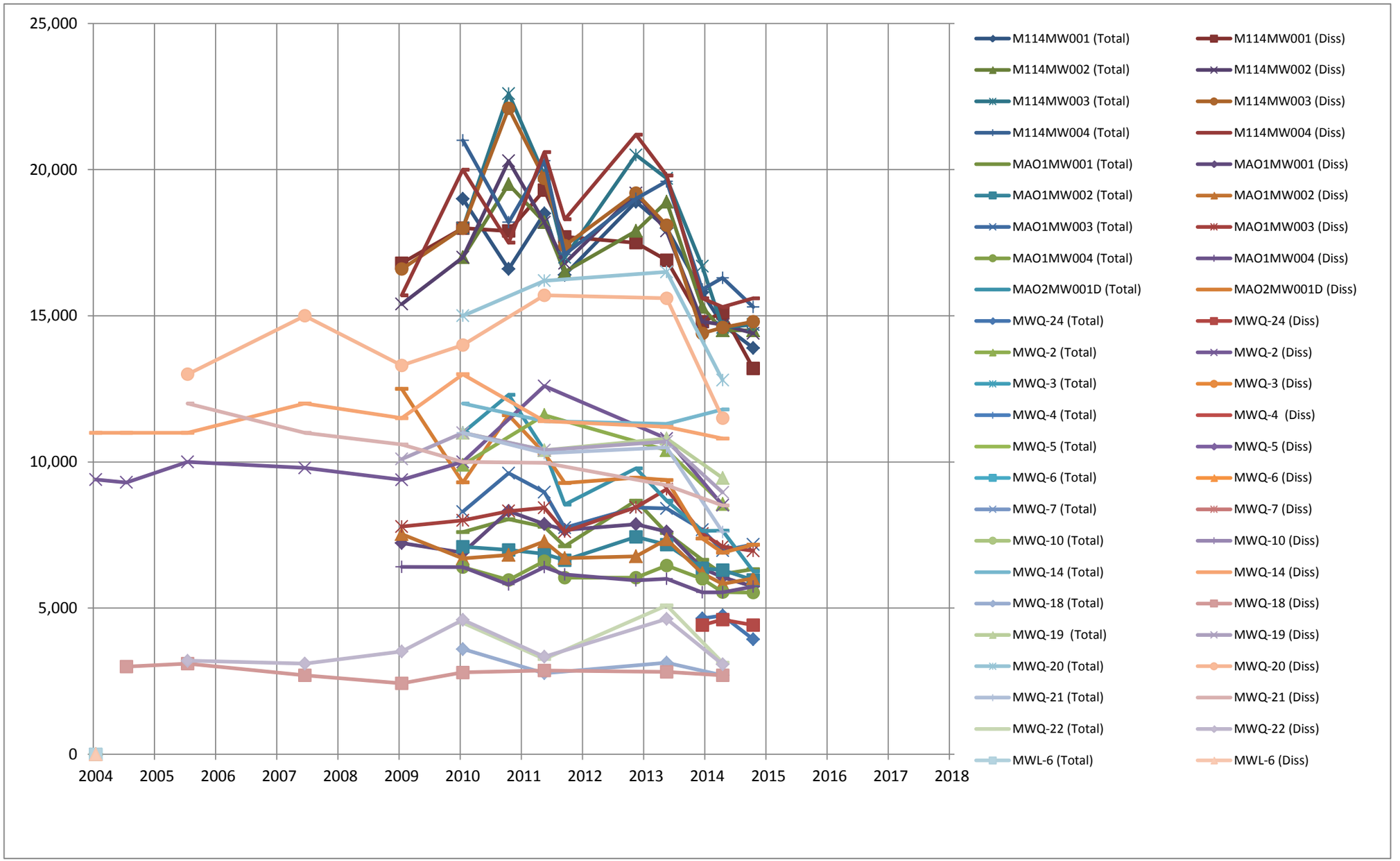
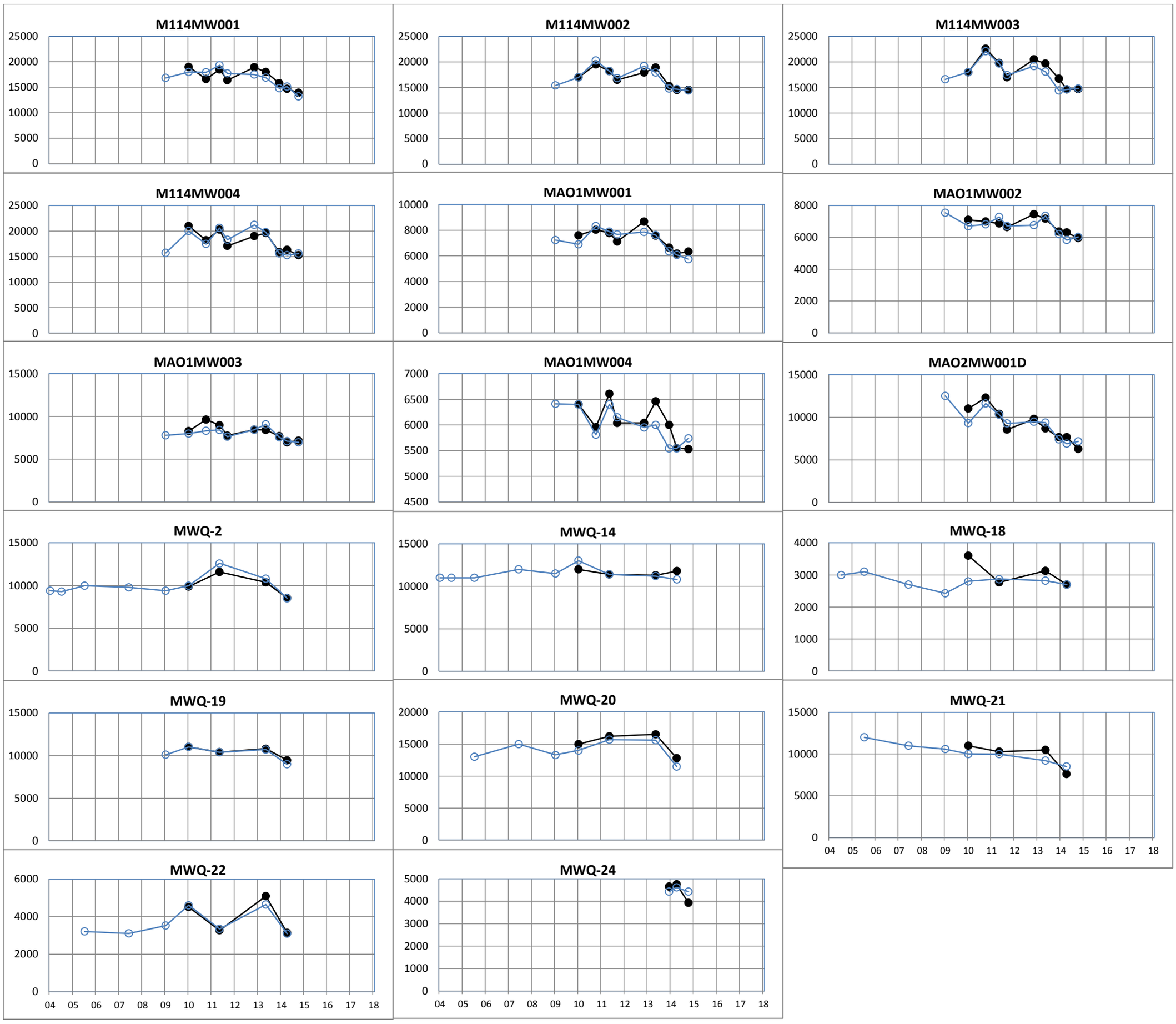


TABLE 6r
POTASSIUM

TABLE 6r
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO



Notes:
Data in µg/L

Total Concentration
Dissolved Concentration

TABLE 6r
POTASSIUM

TABLE 6s
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

DATE	Semiannual Network																			
	SWMU 114								SWMU 130								SWMU 131			
	M114MW001		M114MW002		M114MW003		M114MW004		MAO1MW001		MAO1MW002		MAO1MW003		MAO1MW004		MAO2MW001D		MWQ-24	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04																				
Jul-04																				
Jul-05																				
Jun-07																				
Jan-09		58.1		50.8		72.1		33.5		6.3		9.3		13.0		13.9		52.4		
Jan-10	33	33	24	33	40	45	31	29	4.90	8.30	5.0	5.1	6.6	6.8	8.9	<D.L.	150	140		
Oct-10	<D.L.	<D.L.	30.5	22.6	36.2	38.4	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	144	139		
May-11	31.1	28.8	20	21.8	30.7	31.5	19.6	18.9	<D.L.	<D.L.	5.87	<D.L.	<D.L.	<D.L.	4.44	<D.L.	94.7	107		
Sep-11	30.3	30.1	23.2	20.1	29.6	29.7	21.6	22.4	<D.L.	<D.L.	<D.L.	4.49	<D.L.	<D.L.	6.15	5.03	117	132		
Nov-12	33.2	33.5	25.4	27	37.3	29.7	24.5	25.4	7.2	7.07	<D.L.	<D.L.	<D.L.	<D.L.	5.9	<D.L.	113	106		
May-13	29.4	29.1	10.2		31.9	32.6	22.1	22	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	76.2	124		
Dec-13	27.4	29.9	12	12.8	33.4	29.1	20.6	21.2	4.33	4.09	4.93	5.14	4.48	4.05	6.75	6.24	14.7	30.1	0.48	0.59
Apr-14	34.1	30.9	18	16.9	32.8	30	23.8	22.5	5.2	5.7	6.29	5.77	5.54	5.74	7	6.76	36.5	35.9	0.95	0.8
Oct-14	29.2	25.8	18.7	15	31.7	28.7	23.6	21.9	4.59	4.24	4.79	4.61	4.4	3.79	6.35	6.81	33.7	42	0.58	0.65
Min	0.0	0.0	10.2	12.8	29.6	28.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.7	30.1	0.0	0.0
Max	34.1	58.1	30.5	50.8	40.0	72.1	31.0	33.5	7.2	8.3	6.3	9.3	6.6	13.0	8.9	13.9	150.0	140.0	1.0	0.8
Avg	27.5	29.9	20.2	24.4	33.7	36.7	20.8	21.7	2.9	3.6	3.0	3.4	2.3	3.3	5.1	3.9	86.6	90.8	0.5	0.5

DATE	Annual Network													
	MWQ-2		MWQ-14		MWQ-18		MWQ-19		MWQ-20		MWQ-21		MWQ-22	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04		<D.L.		23										
Jul-04		<D.L.		21		3.1								
Jul-05		5.4		27		2.4				8.2		12		8.8
Jun-07		7.1		27		4.0				13		11		7.0
Jan-09		2.2		45.7		3.8		12.8		30.4		14.8		2.3
Jan-10	<D.L.	5.3	28	26	<D.L.	6.8	<D.L.	<D.L.	<D.L.	<D.L.	12	10	<D.L.	<D.L.
Oct-10														
May-11	<D.L.	<D.L.	26.3	23.2	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	11	9.9	<D.L.	5
Sep-11														
Nov-12														
May-13	<D.L.	<D.L.	24.9	28	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	10.7	<D.L.	<D.L.
Dec-13														
Apr-14	3.39	4.22	25.1	24.1	2.41	2.9	2.13	1.62	<D.L.	<D.L.	8.19	10.7	0.71	0.84
Oct-14														
Min	0.0	0.0	24.9	21.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.9	0.0	0.0
Max	3.4	7.1	28.0	45.7	2.4	6.8	2.1	12.8	0.0	30.4	12.0	14.8	0.7	8.8
Avg	0.8	2.7	26.1	27.2	0.6	2.9	0.5	2.9	0.0	7.4	7.8	11.3	0.2	3.4

Notes:

Data in µg/L

NMED SSL Tapwater Screening Level: 98.73 µg/L

Red indicates exceedance

Blank cells indicate no data

Wells MWQ-3, -4, -5, -6, -7, -10, -23, and MWL-6 not sampled after spring 2011

TABLE 6s
SELENIUM

TABLE 6s
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

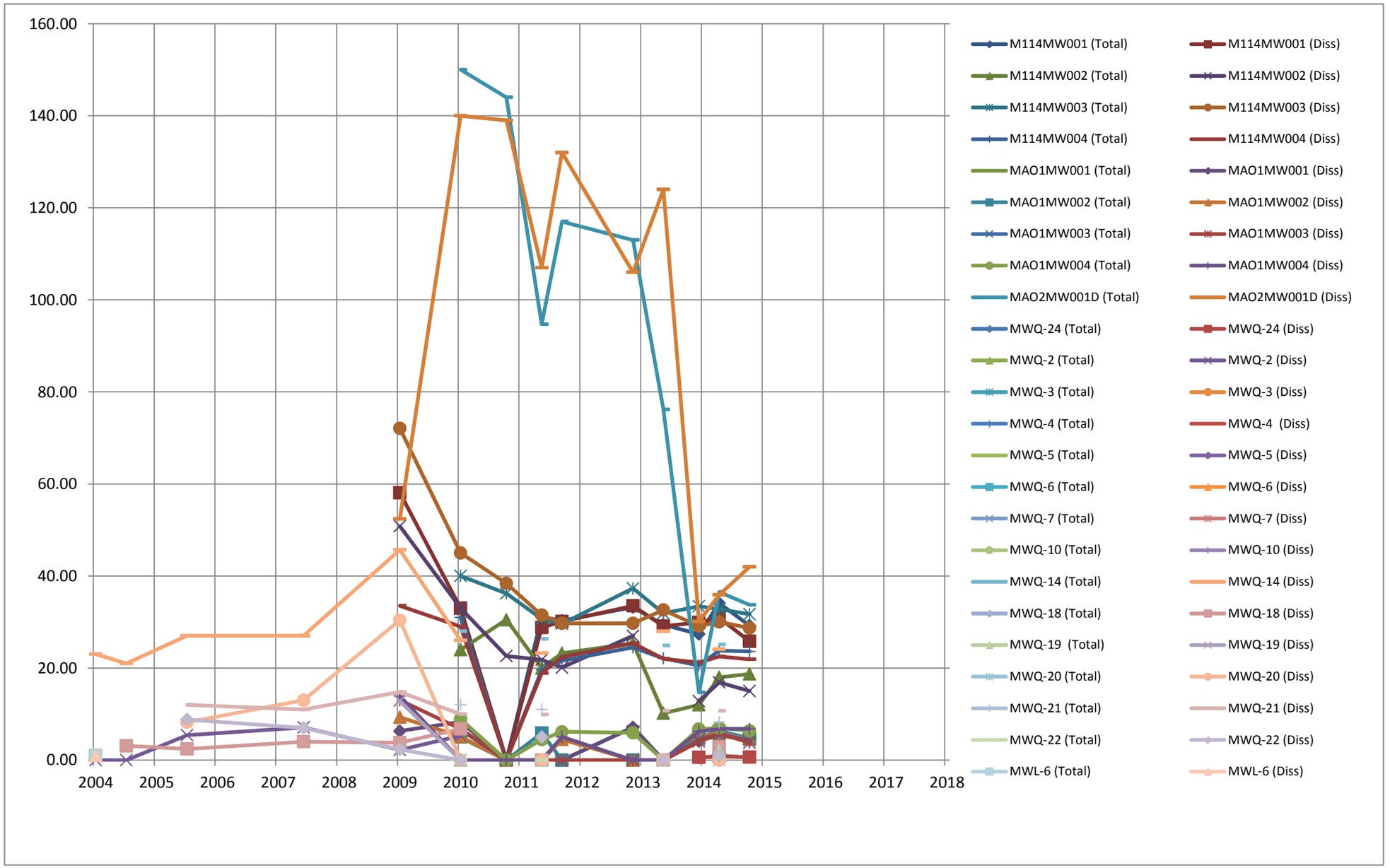
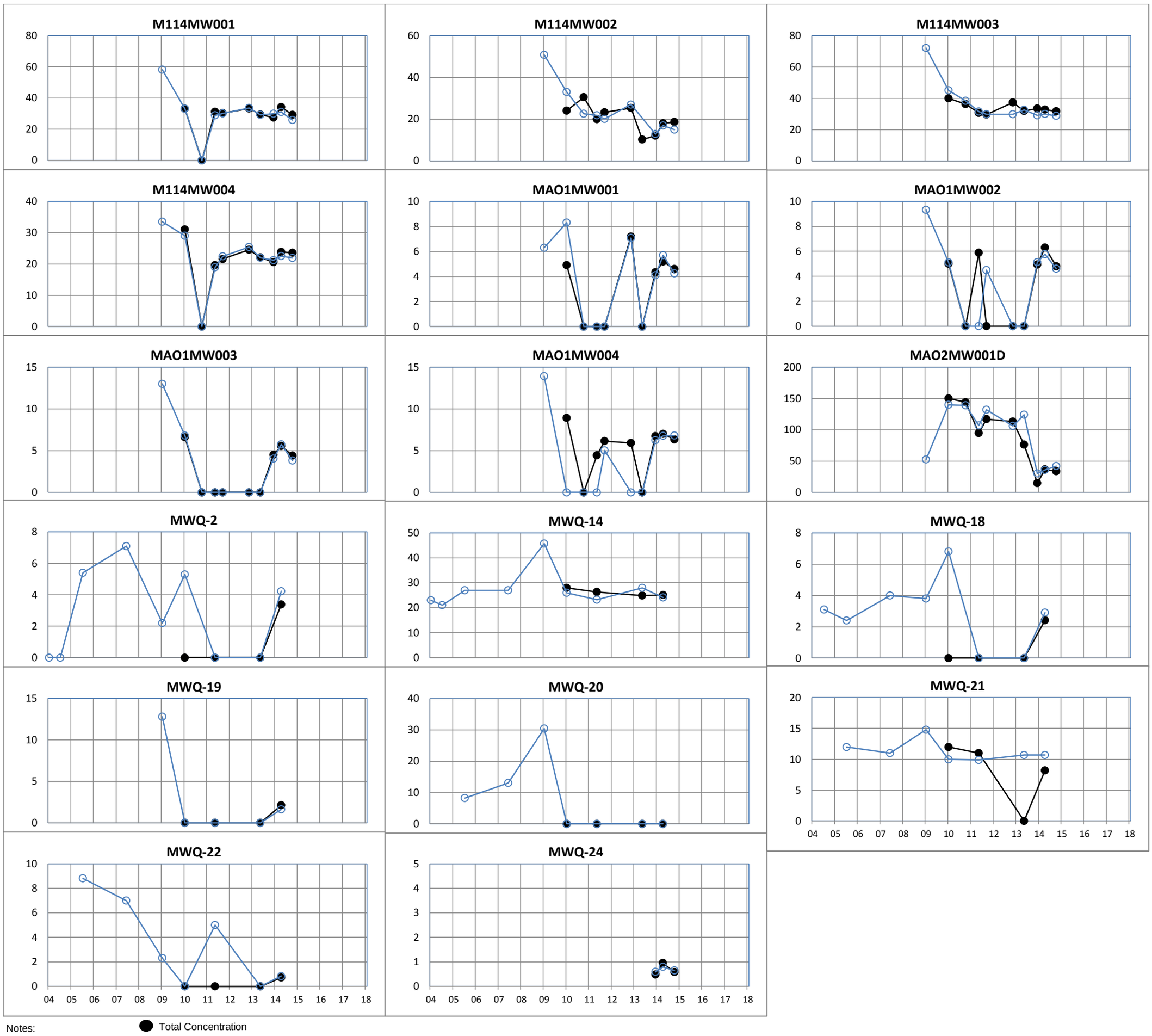


TABLE 6s
SELENIUM

TABLE 6s
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO



Notes:

Data in µg/L

TABLE 6s
SELENIUM

TABLE 6t
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

DATE	Semiannual Network																			
	SWMU 114								SWMU 130								SWMU 131			
	M114MW001		M114MW002		M114MW003		M114MW004		MAO1MW001		MAO1MW002		MAO1MW003		MAO1MW004		MAO2MW001D		MWQ-24	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04																				
Jul-04																				
Jul-05																				
Jun-07																				
Jan-09																				
Jan-10	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
Oct-10	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
May-11	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
Sep-11	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
Nov-12	<D.L.	<D.L.	0.98	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	1.03	1.10	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
May-13	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
Dec-13	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Apr-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Oct-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Min	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

DATE	Annual Network													
	MWQ-2		MWQ-14		MWQ-18		MWQ-19		MWQ-20		MWQ-21		MWQ-22	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04		<D.L.		<D.L.										
Jul-04		<D.L.		0.061		<D.L.								
Jul-05		<D.L.		<D.L.		<D.L.				<D.L.		<D.L.		<D.L.
Jun-07														
Jan-09		<D.L.		<D.L.		<D.L.		<D.L.		<D.L.		<D.L.		<D.L.
Jan-10	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Oct-10														
May-11	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Sep-11														
Nov-12														
May-13	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Dec-13														
Apr-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Oct-14														
Min	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Notes:

Data in µg/L

NMED SSL Tapwater Screening Level: 81.9 µg/L

Red indicates exceedance

Blank cells indicate no data

Wells MWQ-3, -4, -5, -6, -7, -10, -23, and MWL-6 not sampled after spring 2011

Due to a preponderance of no detects trends are not plotted

TABLE 6t
SILVER

TABLE 6u
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

DATE	Semiannual Network																			
	SWMU 114								SWMU 130								SWMU 131			
	M114MW001		M114MW002		M114MW003		M114MW004		MAO1MW001		MAO1MW002		MAO1MW003		MAO1MW004		MAO2MW001D		MWQ-24	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04																				
Jul-04																				
Jul-05																				
Jun-07																				
Jan-09		2,910,000		2,610,000		3,270,000		2,780,000		732,000		645,000		655,000		401,000		1,880,000		
Jan-10	2,200,000	2,200,000	2,300,000	2,200,000	3,000,000	2,700,000	2,400,000	2,500,000	680,000	670,000	550,000	540,000	510,000	500,000	350,000	340,000	1,800,000	1,600,000		
Oct-10	1,950,000	2,130,000	2,030,000	2,170,000	2,600,000	2,660,000	2,250,000	2,260,000	582,000	599,000	548,000	491,000	591,000	463,000	315,000	301,000	1,570,000	1,580,000		
May-11	1,960,000	2,020,000	2,040,000	2,020,000	2,620,000	2,550,000	2,260,000	2,240,000	567,000	588,000	491,000	527,000	469,000	458,000	308,000	297,000	1,930,000	1,910,000		
Sep-11	2,080,000	2,080,000	2,100,000	2,220,000	2,540,000	2,580,000	2,170,000	2,480,000	569,000	556,000	531,000	530,000	459,000	430,000	321,000	323,000	1,580,000	1,630,000		
Nov-12	2,060,000	1,970,000	2,110,000	1,800,000	2,790,000	2,750,000	2,240,000	2,560,000	589,000	602,000	554,000	510,000	480,000	475,000	317,000	325,000	2,060,000	1,710,000		
May-13	2,140,000	2,210,000	2,390,000	2,450,000	2,610,000	2,570,000	2,430,000	2,460,000	611,000	575,000	565,000	567,000	513,000	498,000	338,000	299,000	1,900,000	1,920,000		
Dec-13	2,290,000	2,260,000	2,430,000	2,370,000	2,680,000	2,590,000	2,370,000	2,420,000	610,000	559,000	534,000	521,000	501,000	446,000	345,000	319,000	2,320,000	2,140,000	37,400	33,100
Apr-14	2,390,000	2,290,000	2,320,000	2,230,000	2,710,000	2,530,000	2,530,000	2,390,000	609,000	587,000	532,000	514,000	466,000	458,000	322,000	300,000	2,350,000	2,060,000	52,400	49,900
Oct-14	2,020,000	2,350,000	2,130,000	2,470,000	2,640,000	2,950,000	2,380,000	2,620,000	605,000	534,000	503,000	490,000	466,000	449,000	305,000	306,000	2,030,000	2,110,000	33,000	37,000
Max	2390000	2910000	2430000	2610000	3000000	3270000	2530000	2780000	680000	732000	565000	645000	591000	655000	350000	401000	2350000	2140000	52400	49900
Avg	2121111	2242000	2205556	2254000	2687778	2715000	2336667	2471000	602444	600200	534222	533500	495000	483200	324556	321100	1948889	1854000	40933	40000

DATE	Annual Network													
	MWQ-2		MWQ-14		MWQ-18		MWQ-19		MWQ-20		MWQ-21		MWQ-22	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04		2,200,000		650,000										
Jul-04		2,400,000		720,000		76,000								
Jul-05		2,300,000		660,000		67,000				2,400,000		210,000		280,000
Jun-07		2,300,000		650,000		65,000				3,100,000		200,000		320,000
Jan-09		2,440,000		806,000		63,900		1,330,000		3,360,000		251,000		590,000
Jan-10	2,400,000	2,500,000	760,000	750,000	73,000	71,000	1,300,000	1,300,000	3,000,000	3,000,000	190,000	190,000	600,000	630,000
Oct-10														
May-11	2,170,000	2,260,000	628,000	633,000	65,500	68,800	1,100,000	1,110,000	2,970,000	2,780,000	184,000	181,000	315,000	319,000
Sep-11														
Nov-12														
May-13	2,240,000	2,220,000	739,000	710,000	69,900	69,800	1,290,000	1,330,000	3,280,000	3,370,000	176,000	169,000	567,000	600,000
Dec-13														
Apr-14	2,190,000	2,200,000	784,000	726,000	65,800	64,400	1,070,000	1,070,000	3,440,000	3,120,000	143,000	163,000	338,000	304,000
Oct-14														
Max	2400000	2500000	784000	806000	73000	76000	1300000	1330000	3440000	3370000	190000	251000	600000	630000
Avg	2250000	2313333	727750	700556	68550	68238	1190000	1228000	3172500	3018571	173250	194857	455000	434714

Notes:

Data in µg/L

NMED SSL Tapwater Screening Level: No Criteria

Red indicates exceedance

Blank cells indicate no data

Wells MWQ-3, -4, -5, -6, -7, -10, -23, and MWL-6 not sampled after spring 2011

TABLE 6u
SODIUM

TABLE 6u
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

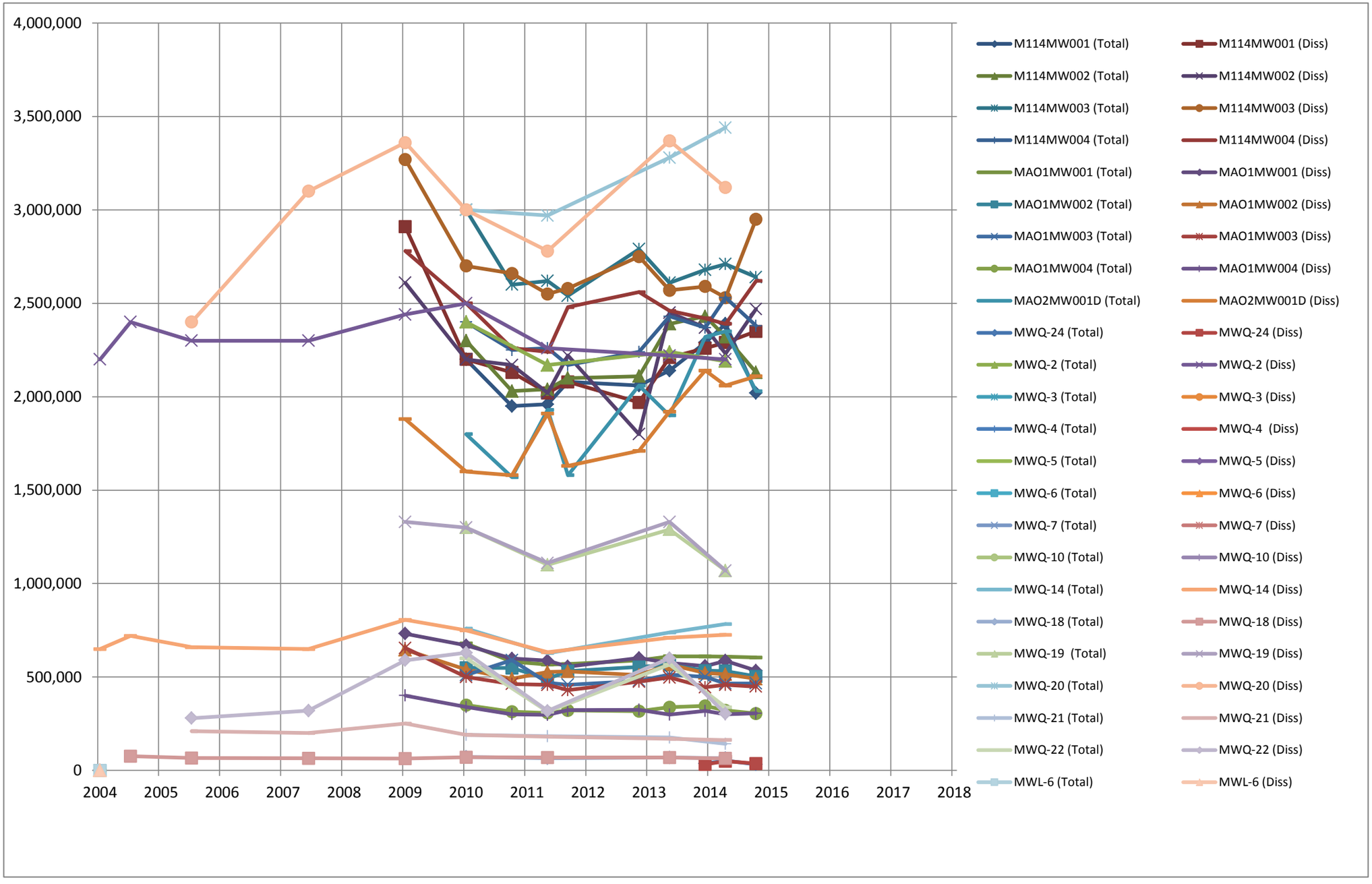
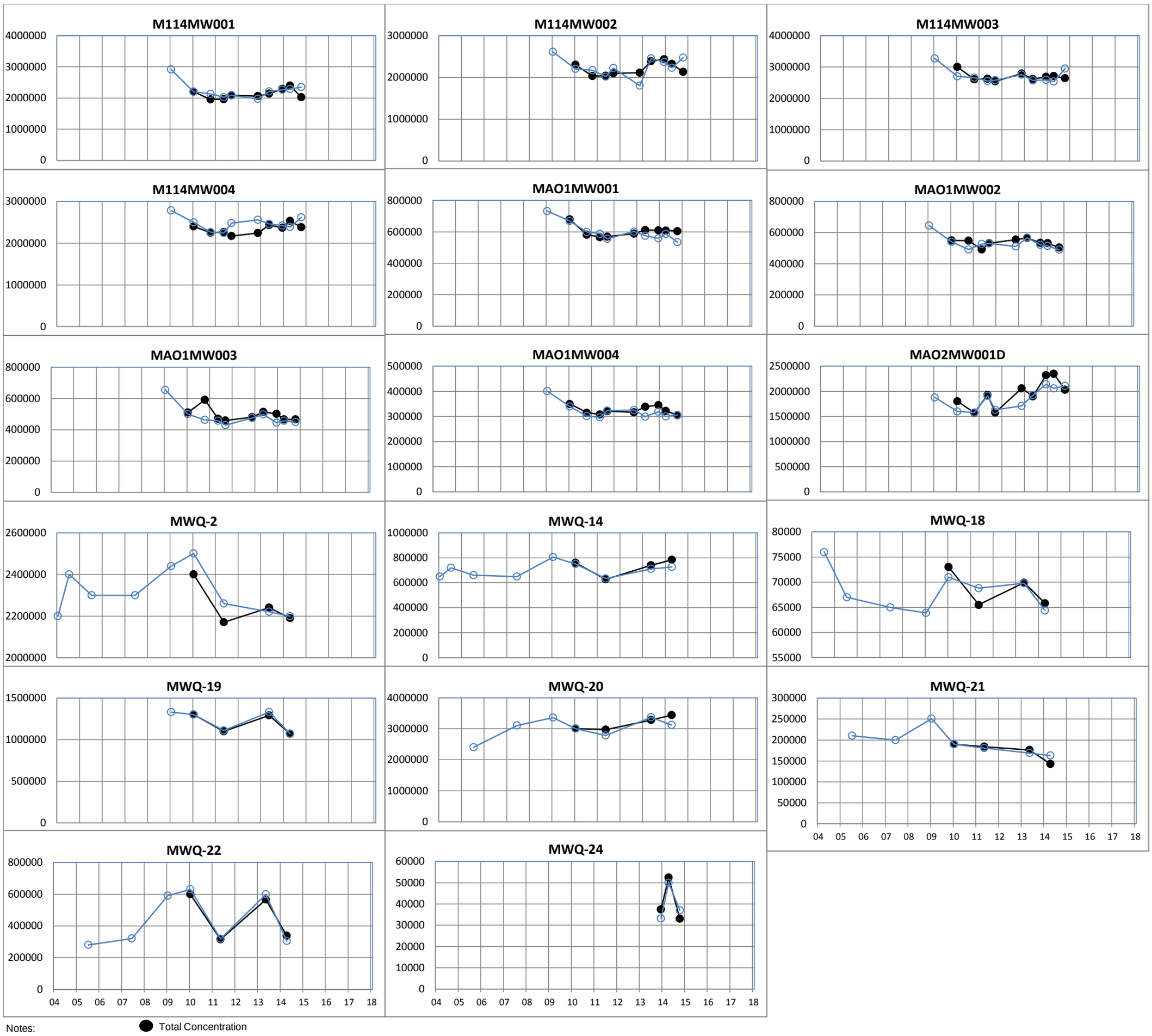


TABLE 6u
SODIUM

TABLE 6u
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO



Notes:

Data in µg/L

TABLE 6u
SODIUM

TABLE 6v
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

DATE	Semiannual Network																			
	SWMU 114								SWMU 130								SWMU 131			
	M114MW001		M114MW002		M114MW003		M114MW004		MAO1MW001		MAO1MW002		MAO1MW003		MAO1MW004		MAO2MW001D		MWQ-24	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04																				
Jul-04																				
Jul-05																				
Jun-07																				
Jan-09																				
Jan-10	40	38	23	21	2.3	2.9	<D.L.	<D.L.	<D.L.	<D.L.	1.4	<D.L.	<D.L.	<D.L.	2.6	2.4	3.2	2.9		
Oct-10	21.8	35.8	26.3	27.7	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	7.17	3.09	<D.L.	<D.L.	<D.L.	<D.L.		
May-11	19.7	19.1	27.0	26.2	<D.L.	<D.L.	<D.L.	<D.L.	2.96	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	2.29	<D.L.	1.3	1.4		
Sep-11	8.97	9.2	40.6	39.4	<D.L.	<D.L.	1.2	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	1.4	2.1		
Nov-12	26.30	7.24	27.4	28.1	29.9	1.64	<D.L.	<D.L.	7.89	<D.L.	13.3	2.69	8.51	1.44	4.08	1.79	6.24	4.02		
May-13	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
Dec-13	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Apr-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Oct-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Min	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max	40.0	38.0	40.6	39.4	29.9	2.9	1.2	0.0	7.9	0.0	13.3	2.7	8.5	3.1	4.1	2.4	6.2	4.0	0.0	0.0
Avg	13.0	12.2	16.0	15.8	3.6	0.5	0.1	0.0	1.2	0.0	1.6	0.3	1.7	0.5	1.0	0.5	1.4	1.2	0.0	0.0

DATE	Annual Network													
	MWQ-2		MWQ-14		MWQ-18		MWQ-19		MWQ-20		MWQ-21		MWQ-22	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04		27		4.9										
Jul-04		18.0		5.7		1.9								
Jul-05		10		5.5		0.90				25.0		6.7		1.7
Jun-07		22		7.7		6.9				84		9.3		2.8
Jan-09														
Jan-10	2.5	1.6	3.7	3.5	2.2	<D.L.	<D.L.	<D.L.	3.3	3.3	1.6	<D.L.	<D.L.	<D.L.
Oct-10														
May-11	1.6	1.89	1.18	<D.L.	6.9	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	1.27	<D.L.	<D.L.	<D.L.
Sep-11														
Nov-12														
May-13	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Dec-13														
Apr-14	<D.L.	<D.L.	<D.L.	15.6	14.3	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	0.71	<D.L.	<D.L.
Oct-14														
Min	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max	2.5	27.0	3.7	15.6	14.3	6.9	0.0	0.0	3.3	84.0	1.6	9.3	0.0	2.8
Avg	1.0	10.1	1.2	5.4	5.9	1.4	0.0	0.0	0.8	18.7	0.7	2.8	0.0	0.8

Notes:

Data in µg/L

NMED SSL Tapwater Screening Level: 371.96 µg/L

Red indicates exceedance

Blank cells indicate no data

Wells MWQ-3, -4, -5, -6, -7, -10, -23, and MWL-6 not sampled after spring 2011

TABLE 6v
NICKEL

TABLE 6v
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

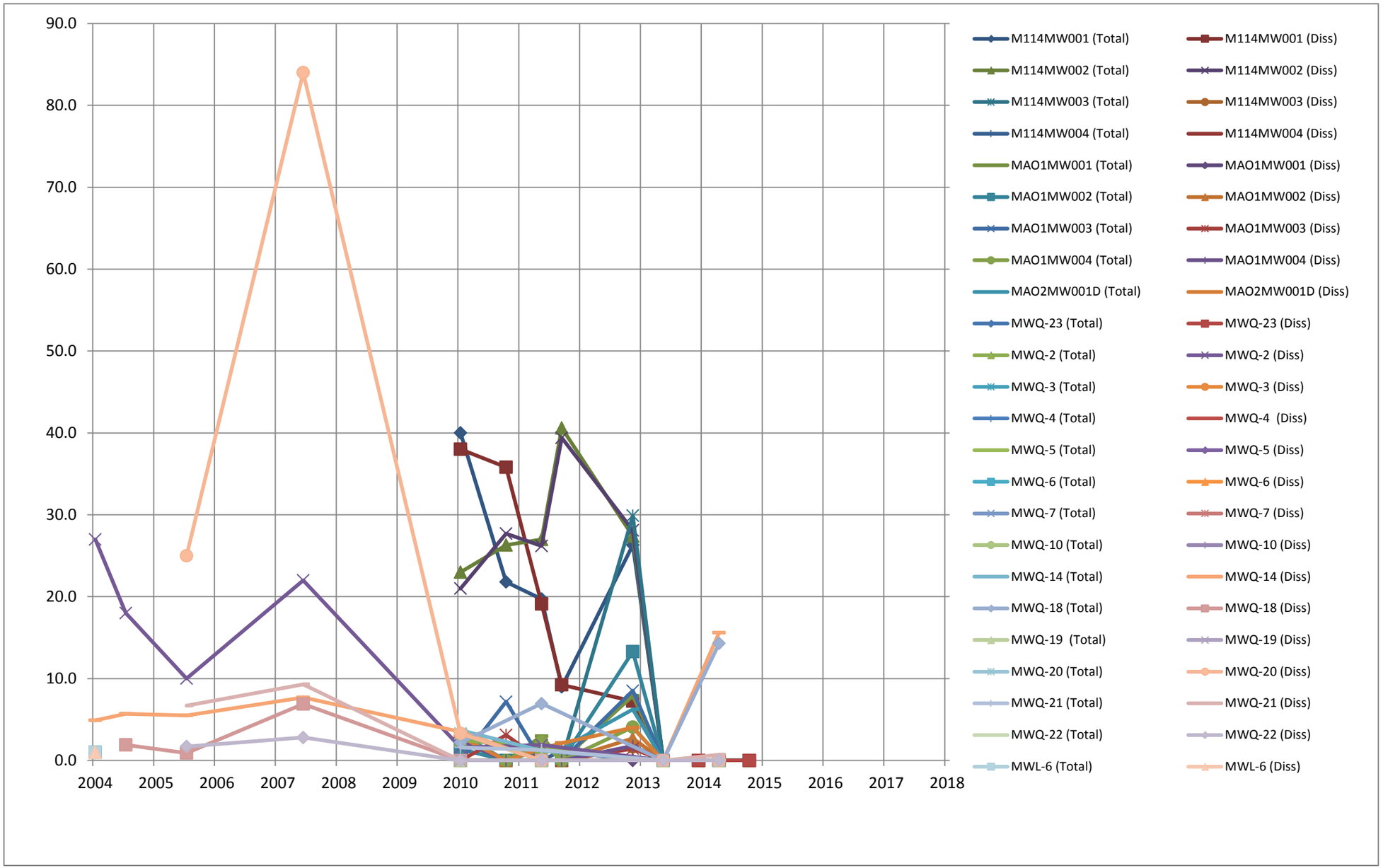
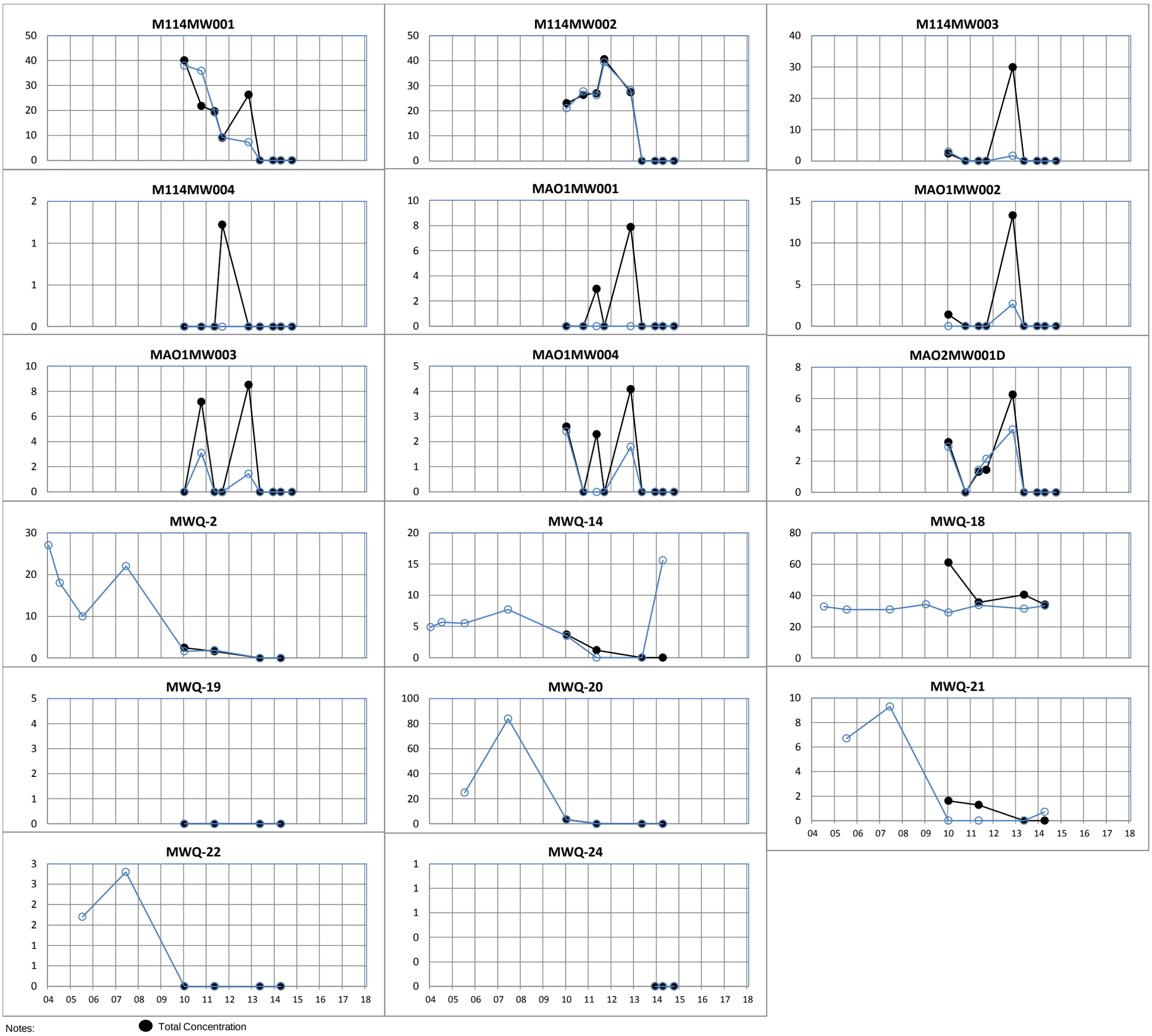


TABLE 6v
NICKEL

TABLE 6v
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO



Notes:
Data in µg/L

Total Concentration
Dissolved Concentration

TABLE 6v
NICKEL

TABLE 6w
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

DATE	Semiannual Network																			
	SWMU 114								SWMU 130								SWMU 131			
	M114MW001		M114MW002		M114MW003		M114MW004		MAO1MW001		MAO1MW002		MAO1MW003		MAO1MW004		MAO2MW001D		MWQ-24	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04																				
Jul-04																				
Jul-05																				
Jun-07																				
Jan-09																				
Jan-10	<D.L.	<D.L.	<D.L.	<D.L.	**8.4**	**11.0**	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
Oct-10	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	**2.88**	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
May-11	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
Sep-11	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
Nov-12	**3.04**	**5.18**	<D.L.	<D.L.	**3.61**	<D.L.	<D.L.	**5.45**	<D.L.	<D.L.	<D.L.	**4.91**	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
May-13	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	**5.57**	<D.L.		
Dec-13	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Apr-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Oct-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Min	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max	3.0	5.2	0.0	0.0	8.4	11.0	0.0	5.5	0.0	0.0	0.0	4.9	0.0	0.0	0.0	0.0	5.6	0.0	0.0	0.0
Avg	0.3	0.6	0.0	0.0	1.3	1.5	0.0	0.6	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0

DATE	Annual Network													
	MWQ-2		MWQ-14		MWQ-18		MWQ-19		MWQ-20		MWQ-21		MWQ-22	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04														
Jul-04														
Jul-05														
Jun-07						<D.L.				0.037		<D.L.		0.026
Jan-09														
Jan-10	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Oct-10														
May-11	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Sep-11														
Nov-12														
May-13	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	**3.7**	<D.L.
Dec-13														
Apr-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Oct-14														
Min	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7	0.0
Avg	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0

Notes:

Data in µg/L

NMED SSL Tapwater Screening Level: 0.20 µg/L

Red indicates exceedance

Blank cells indicate no data

Wells MWQ-3, -4, -5, -6, -7, -10, -23, and MWL-6 not sampled after spring 2011

Due to a preponderance of no detects trends are not plotted

TABLE 6w
THALLIUM

TABLE 6x
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

DATE	Semiannual Network																			
	SWMU 114								SWMU 130								SWMU 131			
	M114MW001		M114MW002		M114MW003		M114MW004		MAO1MW001		MAO1MW002		MAO1MW003		MAO1MW004		MAO2MW001D		MWQ-24	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04																				
Jul-04																				
Jul-05																				
Jun-07																				
Jan-09																				
Jan-10	2.0	2.2	6.5	2.2	5.6	3.3	3.2	3.0	13	1.50	13	<D.L.	5.4	<D.L.	<D.L.	<D.L.	<D.L.	0.63		
Oct-10	<D.L.	<D.L.	4.49	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	1.93	0.79	<D.L.	<D.L.	6.81	0.43	<D.L.	2.4	<D.L.	<D.L.		
May-11	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	3.16	1.53	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
Sep-11	<D.L.	<D.L.	2.01	<D.L.	2.45	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	1.37	1.24	<D.L.	<D.L.	1.52	<D.L.	<D.L.		
Nov-12	7.87	<D.L.	2.59	<D.L.	65.1	<D.L.	<D.L.	<D.L.	8.07	<D.L.	5.42	<D.L.	1.4	<D.L.	2.68	<D.L.	<D.L.	<D.L.		
May-13	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	3.53	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.		
Dec-13	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Apr-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	6.02	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Oct-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Min	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max	7.9	2.2	6.5	2.2	65.1	3.3	3.2	3.0	13.0	1.5	13.0	6.0	6.8	0.4	2.7	2.4	0.0	0.6	0.0	0.0
Avg	1.1	0.2	1.7	0.2	8.1	0.4	0.4	0.3	3.3	0.4	2.0	0.8	1.7	0.0	0.3	0.4	0.0	0.1	0.0	0.0

DATE	Annual Network													
	MWQ-2		MWQ-14		MWQ-18		MWQ-19		MWQ-20		MWQ-21		MWQ-22	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04		<D.L.		<D.L.										
Jul-04		<D.L.		<D.L.		<D.L.								
Jul-05														
Jun-07														
Jan-09														
Jan-10	3.6	2.0	1.5	1.2	29	<D.L.	3.7	2.1	3.5	2.8	29	0.97	9.0	0.74
Oct-10														
May-11	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	1.42	<D.L.	10.6	5.29	<D.L.	<D.L.
Sep-11														
Nov-12														
May-13	<D.L.	<D.L.	<D.L.	<D.L.	38.4	<D.L.	<D.L.	<D.L.	136	<D.L.	15.9	<D.L.	15.7	<D.L.
Dec-13														
Apr-14	<D.L.	<D.L.	<D.L.	<D.L.	1.56	0.32	1.35	<D.L.	<D.L.	<D.L.	13.4	0.64	<D.L.	<D.L.
Oct-14														
Min	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.6	0.0	0.0	0.0
Max	3.6	2.0	1.5	1.2	38.4	0.3	3.7	2.1	136.0	2.8	29.0	5.3	15.7	0.7
Avg	0.9	0.3	0.4	0.2	17.2	0.1	1.3	0.5	35.2	0.7	17.2	1.7	6.2	0.2

Notes:

Data in µg/L

NMED SSL Tapwater Screening Level: N/A

Red indicates exceedance

Blank cells indicate no data

Wells MWQ-3, -4, -5, -6, -7, -10, -23, and MWL-6 not sampled after spring 2011

Due to a preponderance of no detects trends are not plotted

TABLE 6x
TITANIUM

TABLE 6y
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

DATE	Semiannual Network																			
	SWMU 114								SWMU 130								SWMU 131			
	M114MW001		M114MW002		M114MW003		M114MW004		MAO1MW001		MAO1MW002		MAO1MW003		MAO1MW004		MAO2MW001D		MWQ-24	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04																				
Jul-04																				
Jul-05																				
Jun-07																				
Jan-09		3.1		7.5		6.7		2.9		8.7		13.4		11.5		19.1		5.6		
Jan-10	6	6.4	8.2	6.4	9.4	9.7	8	6.8	11	9.7	13	12	14	13	20	20	9.8	8.8		
Oct-10	4.4	3.99	<D.L.	<D.L.	<D.L.	<D.L.	2.86	2.27	28.9	30.4	31.6	29.7	33.6	32.5	33.1	33.4	28.9	30.8		
May-11	**75.3**	**73.5**	**81**	**74.3**	**79.7**	**76.2**	**74.9**	**68.9**	61.1	58.3	50.8	53.4	**68.2**	**65.5**	58.8	56.4	**69.9**	**66.2**		
Sep-11	14.8	10.5	11	10.6	12.1	13.4	4	6.46	23	26.1	25.9	27.4	29.6	26.7	26.4	32.5	24.5	25.9		
Nov-12	20.2	11.8	13	22.3	16.6	21.1	14.2	8.78	30.6	27.2	23.9	20.7	36.4	35.5	27.3	32.2	32.8	30.4		
May-13	**86.3**	**66.3**	**92.9**	**68.9**	**90.9**	**73.1**	**78.7**	**73.7**	56.3	50.3	52.5	54.8	**68**	60.2	57.2	56.2	41.1	42.4		
Dec-13	6.42	5.53	9.67	8.97	10.5	8.85	6.09	5.13	11.9	11.1	11.1	10.8	13.3	13.3	19.4	17.1	6.25	5.27	30.6	28.4
Apr-14	6.05	5.76	8.14	7.1	9.5	9.04	6.68	6.2	10.2	10	11.7	10.5	12	12.2	18	17.8	5.34	4.38	20.9	19.7
Oct-14	6.5	6.58	7.27	7.92	9.38	9.77	5.48	5.78	12	11	11.5	11.5	13.5	12.9	18	17.7	<D.L.	<D.L.	33.4	34.6
Min	4.4	3.1	0.0	0.0	0.0	0.0	2.9	2.3	10.2	8.7	11.1	10.5	12.0	11.5	18.0	17.1	0.0	0.0	20.9	19.7
Max	86.3	73.5	92.9	74.3	90.9	76.2	78.7	73.7	61.1	58.3	52.5	54.8	68.2	65.5	58.8	56.4	69.9	66.2	33.4	34.6
Avg	25.1	19.3	25.7	21.4	26.5	22.8	22.3	18.7	27.2	24.3	25.8	24.4	32.1	28.3	30.9	30.2	24.3	22.0	28.3	27.6

DATE	Annual Network													
	MWQ-2		MWQ-14		MWQ-18		MWQ-19		MWQ-20		MWQ-21		MWQ-22	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04		1.5		3.9										
Jul-04		0.94		4.2		54								
Jul-05		4.5		4.6		60				3.8		45		33
Jun-07		<D.L.		5.2		62				0.87		47		15
Jan-09		<D.L.		4.8		52.9		<D.L.		<D.L.		44.6		0.42
Jan-10	<D.L.	1.2	6.2	6.0	63	58	1.8	1.3	1.1	1.8	48	45	1.3	1.5
Oct-10														
May-11	**73.5**	**71.6**	59	58.1	**78.6**	**79.9**	**64.3**	**64.6**	**64**	**64.1**	**99.7**	**98.8**	29.4	32.2
Sep-11														
Nov-12														
May-13	**66.9**	39.7	56.1	37.6	**78.3**	**75.3**	52.3	40.9	**65.4**	40.9	**85.9**	**70.5**	28.5	20
Dec-13														
Apr-14	<D.L.	<D.L.	6.57	5.95	56.3	57.7	<D.L.	<D.L.	<D.L.	<D.L.	42.2	46.3	<D.L.	<D.L.
Oct-14														
Min	0.0	0.0	6.2	3.9	56.3	52.9	0.0	0.0	0.0	0.0	42.2	44.6	0.0	0.0
Max	73.5	71.6	59.0	58.1	78.6	79.9	64.3	64.6	65.4	64.1	99.7	98.8	29.4	33.0
Avg	35.1	13.3	32.0	14.5	69.1	62.5	29.6	21.4	32.6	15.9	69.0	56.7	14.8	14.6

Notes:

Data in µg/L

NMED SSL Tapwater Screening Level: 63.07 µg/L

Red indicates exceedance

Blank cells indicate no data

Wells MWQ-3, -4, -5, -6, -7, -10, -23, and MWL-6 not sampled after spring 2011

TABLE 6y
VANADIUM

TABLE 6y
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

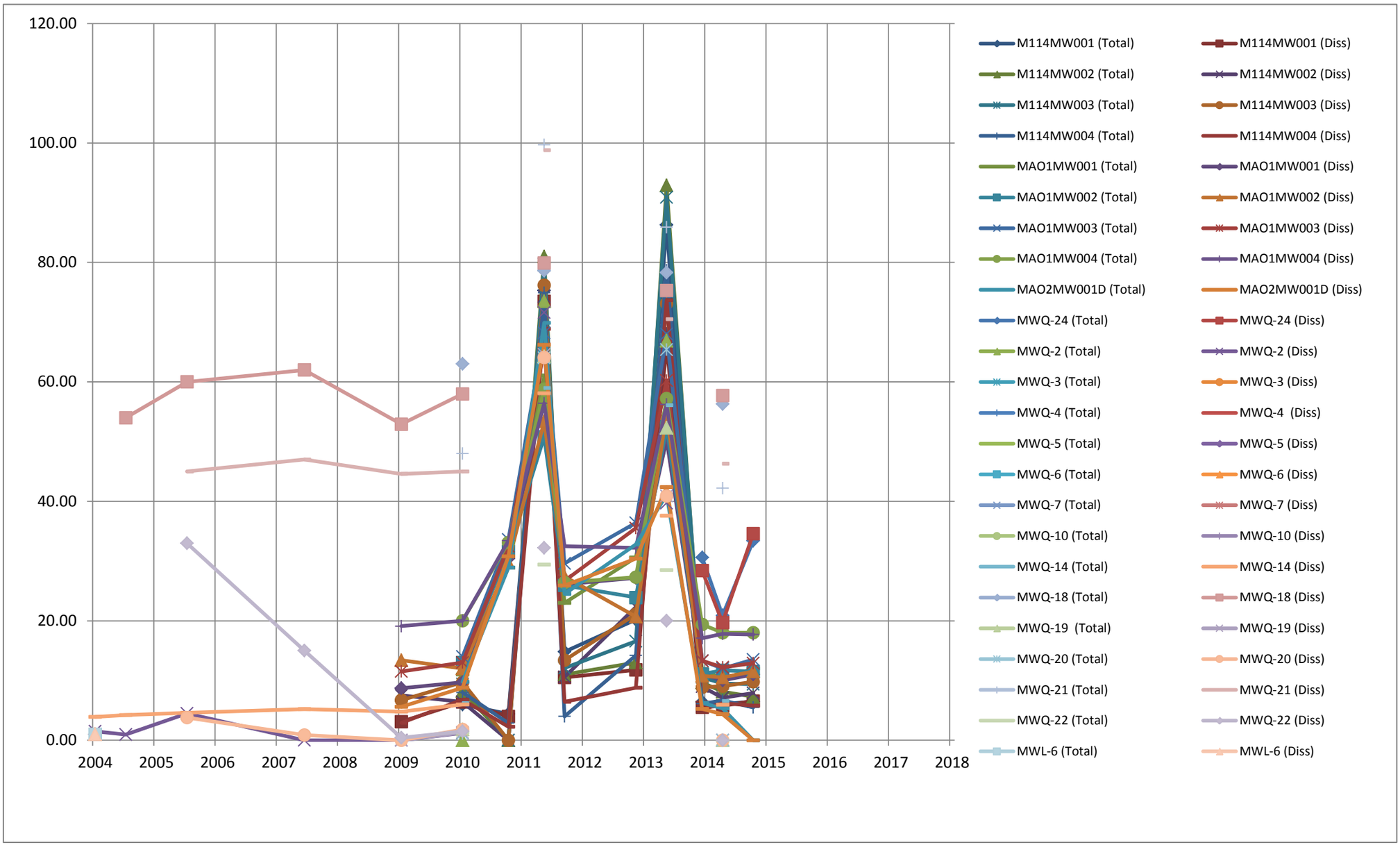
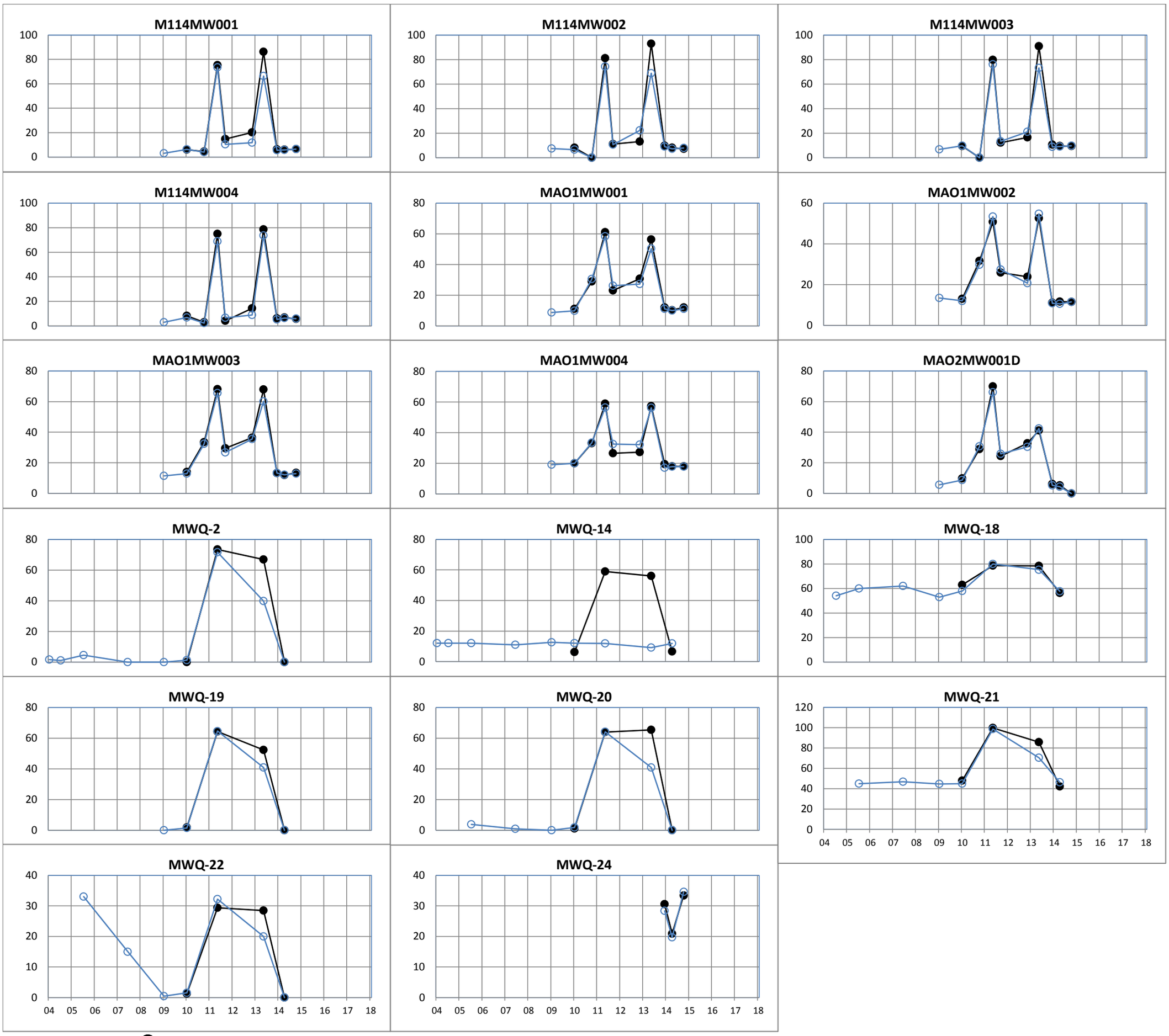


TABLE 6y
VANADIUM

TABLE 6y
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO



Notes:
Data in µg/L

Total Concentration
Dissolved Concentration

TABLE 6y
VANADIUM

TABLE 6z
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

DATE	Semiannual Network																			
	SWMU 114								SWMU 130								SWMU 131			
	M114MW001		M114MW002		M114MW003		M114MW004		MAO1MW001		MAO1MW002		MAO1MW003		MAO1MW004		MAO2MW001D		MWQ-24	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04																				
Jul-04																				
Jul-05																				
Jun-07																				
Jan-09		450		533		421		885		415		826		447		257		375		
Jan-10	12	11	18	13	9.4	9.2	12	9.9	6.4	4.5	19	10	7.0	6.0	5.3	8.4	97	87		
Oct-10	715	741	1,350	1,350	<D.L.	<D.L.	443	427	<D.L.	<D.L.	11	<D.L.	11	<D.L.	<D.L.	<D.L.	96.5	92.9		
May-11	47.2	46.8	175	163	17.5	14.2	655	653	2.74	<D.L.	20.1	<D.L.	13.4	4.16	22.3	9.8	129	128		
Sep-11	394	413	239	234	276	271	347	366	229	248	210	219	339	316	276	305	288	301		
Nov-12	45.6	29.2	154	78	33.1	20.5	29.6	34.1	18.6	17.8	32.6	24.9	13.1	26.5	196	77.7	140	114		
May-13	4160	3850	122	102	334	375	2490	2500	437	509	1240	1280	3090	3830	691	729	341	393		
Dec-13	6.42	5.53	9.67	8.97	10.5	8.85	6.09	5.13	11.9	11.1	11.1	10.8	13.3	13.3	19.4	17.7	6.25	5.27	30.6	28.4
Apr-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	64.3	72.7	<D.L.	<D.L.	33.7		<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Oct-14	59.7	55.3	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	102	<D.L.	<D.L.	<D.L.	<D.L.	26.3	<D.L.	11.7	10.9	<D.L.	<D.L.	<D.L.	<D.L.
Min	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max	4160.0	3850.0	1350.0	1350.0	334.0	421.0	2490.0	2500.0	437.0	509.0	1240.0	1280.0	3090.0	3830.0	691.0	729.0	341.0	393.0	30.6	28.4
Avg	604.4	560.2	229.7	248.2	75.6	112.0	449.7	505.5	78.4	120.5	175.3	263.4	390.3	464.3	135.7	141.6	122.0	149.6	10.2	9.5

DATE	Annual Network													
	MWQ-2		MWQ-14		MWQ-18		MWQ-19		MWQ-20		MWQ-21		MWQ-22	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04		<D.L.		6										
Jul-04		3.8		4.6		3.9								
Jul-05		<D.L.		9.4		5.6				120		9.9		7.6
Jun-07		5.0		8.3		8.0				18		7.8		6.4
Jan-09		846		266		171		956		384		1130		1710
Jan-10	250	14	7.5	9.0	14	4.5	250	11	290	290	44	8.5	170	<D.L.
Oct-10														
May-11	394	426	<D.L.	<D.L.	52.40	38.20	865	615	2370	2190	15.6	<D.L.	7.64	<D.L.
Sep-11														
Nov-12														
May-13	1050	987	221	223	211	193	548	149	11,900	11,100	196	118	2230	1860
Dec-13														
Apr-14	442	440	27.7	26.2	9.73	7.15	84.4	<D.L.	518	462	79.2	9.65	<D.L.	<D.L.
Oct-14														
Min	250.0	0.0	0.0	0.0	9.7	3.9	84.4	0.0	290.0	18.0	15.6	0.0	0.0	0.0
Max	1050.0	987.0	221.0	266.0	211.0	193.0	865.0	956.0	11900.0	11100.0	196.0	1130.0	2230.0	1860.0
Avg	534.0	302.4	64.1	61.4	71.8	53.9	436.9	346.2	3769.5	2080.6	83.7	183.4	601.9	512.0

Notes:

Data in µg/L

NMED SSL Tapwater Screening Level: 5960.45 µg/L

Red indicates exceedance

Blank cells indicate no data

Wells MWQ-3, -4, -5, -6, -7, -10, -23, and MWL-6 not sampled after spring 2011

TABLE 6z
ZINC

TABLE 6z
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

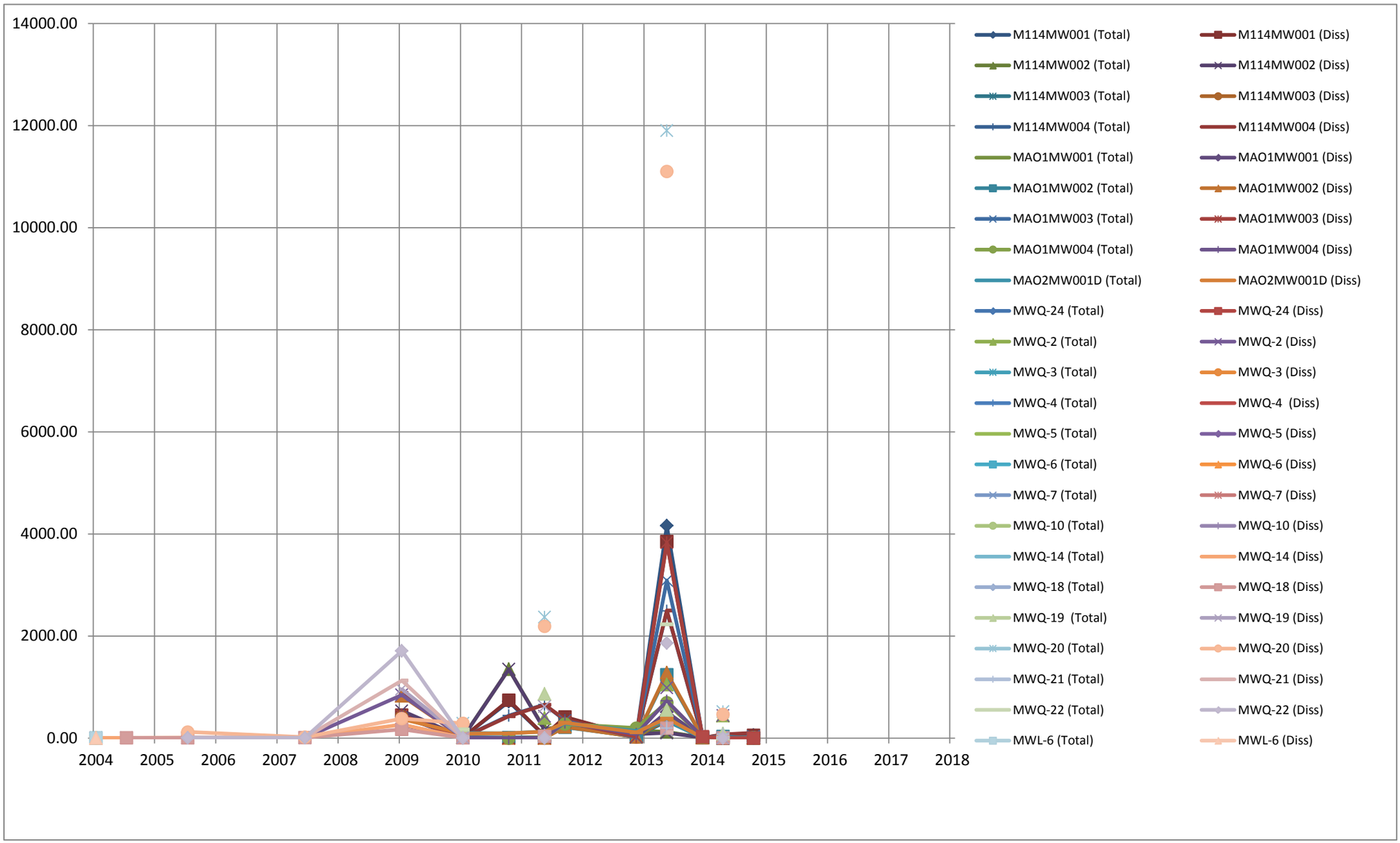
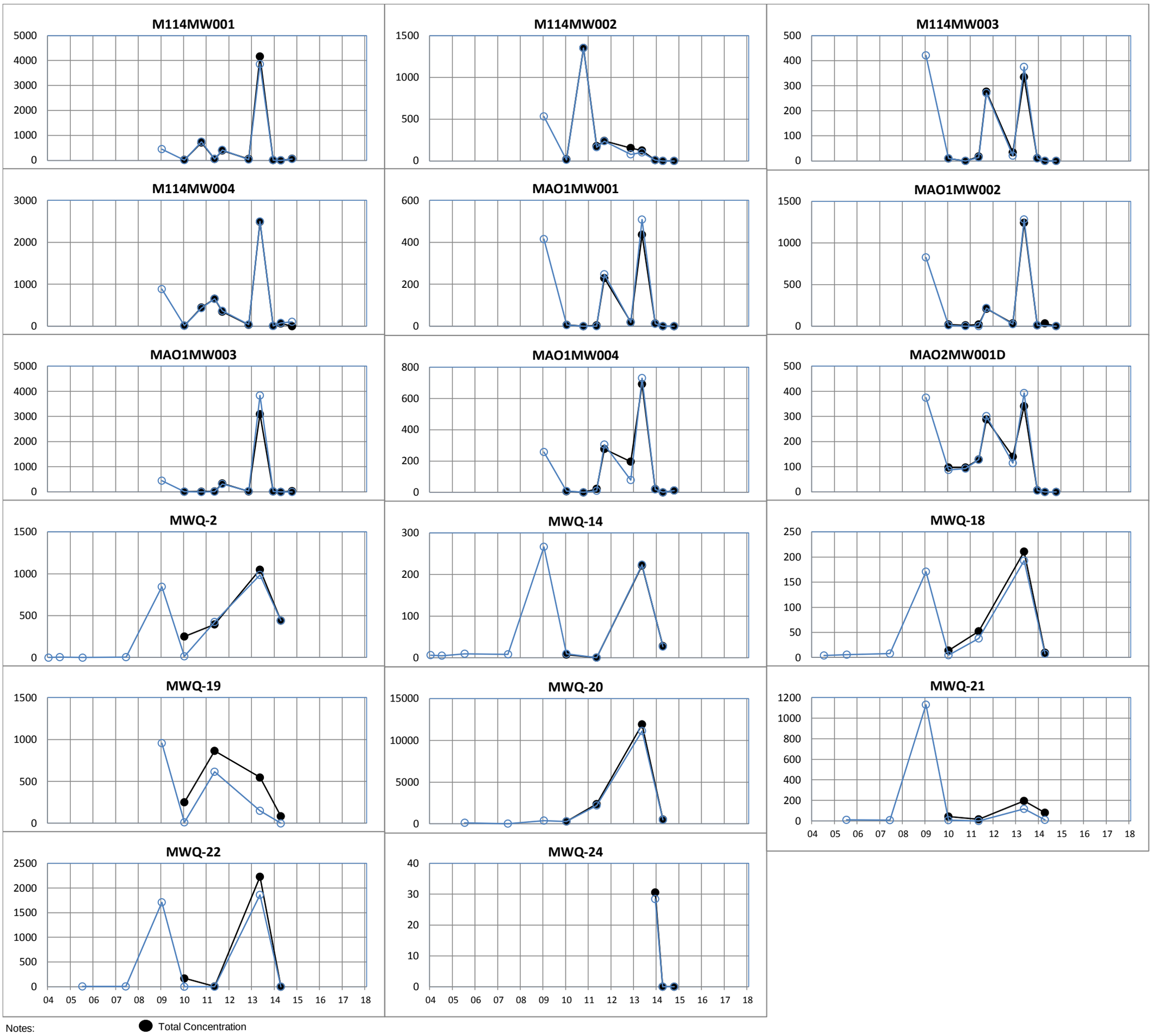


TABLE 6z
ZINC

TABLE 6z
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO



Notes:

Data in µg/L

Total Concentration

Dissolved Concentration

TABLE 6z
ZINC

TABLE 6aa
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

DATE	Semiannual Network									
	SWMU 114				SWMU 130				SWMU 131	
	M114MW001	M114MW002	M114MW003	M114MW004	MAO1MW001	MAO1MW002	MAO1MW003	MAO1MW004	MAO2MW001D	MWQ-24
Jan-04										
Jul-04										
Jul-05										
Jun-07										
Jan-09										
Jan-10	83	72	61	67	180	180	160	200	150	
Oct-10	91.5	81	52	67.9	168	175	160	205	171	
May-11	79.1	69.2	44.5	56.6	169	171	161	192	130	
Sep-11	79.4	79.8	53.5	59.3	172	180	152	200	142	
Nov-12	94.3	78.7	48.6	72.9	166	180	166	192	157	
May-13	78.0	63.9	48.5	61.3	173	191	159	201	149	
Dec-13	78.7	62.2	54.1	68.4	179	189	159	201	125	216
Apr-14	64.8	66.7	56.9	64.5	169	191	159	196	128	218
Oct-14	96.2	74.1	76.9	85.5	177	186	163	196	145	212
Min	65	62	45	57	166	171	152	192	125	212
Max	96	81	77	86	180	191	166	205	171	218
Average	83	72	55	67	173	183	160	198	144	215

DATE	Annual Network						
	MWQ-2	MWQ-14	MWQ-18	MWQ-19	MWQ-20	MWQ-21	MWQ-22
Jan-04	82	140					
Jul-04	67	140	170				
Jul-05	68.9	133.5	166.9		52.7	206.2	139.9
Jun-07	66	130	160		51	230	170
Jan-09	93.7	212	197	455	64.8	306	99.8
Jan-10	82	140	170	370	66		
Oct-10							
May-11	83.1	133	161	302	55.7	244	147
Sep-11							
Nov-12							
May-13	89.1	147	170	236	60.7	246	77
Dec-13							
Apr-14	95.9	155	172	399	76.3	236	177
Oct-14							
Min	66	130	160	236	51	206	77
Max	96	212	197	455	76	306	177
Average	81	148	171	352	61	245	135

Notes:
Data in mg/L
NMED SSL Tapwater Screening Level: N/A
Red indicates exceedance
Blank cells indicate no data
Wells MWQ-3, -4, -5, -6, -7, -10, -23, and MWL-6 not sampled after spring 2011

TABLE 6aa
ALKALINITY

TABLE 6aa
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

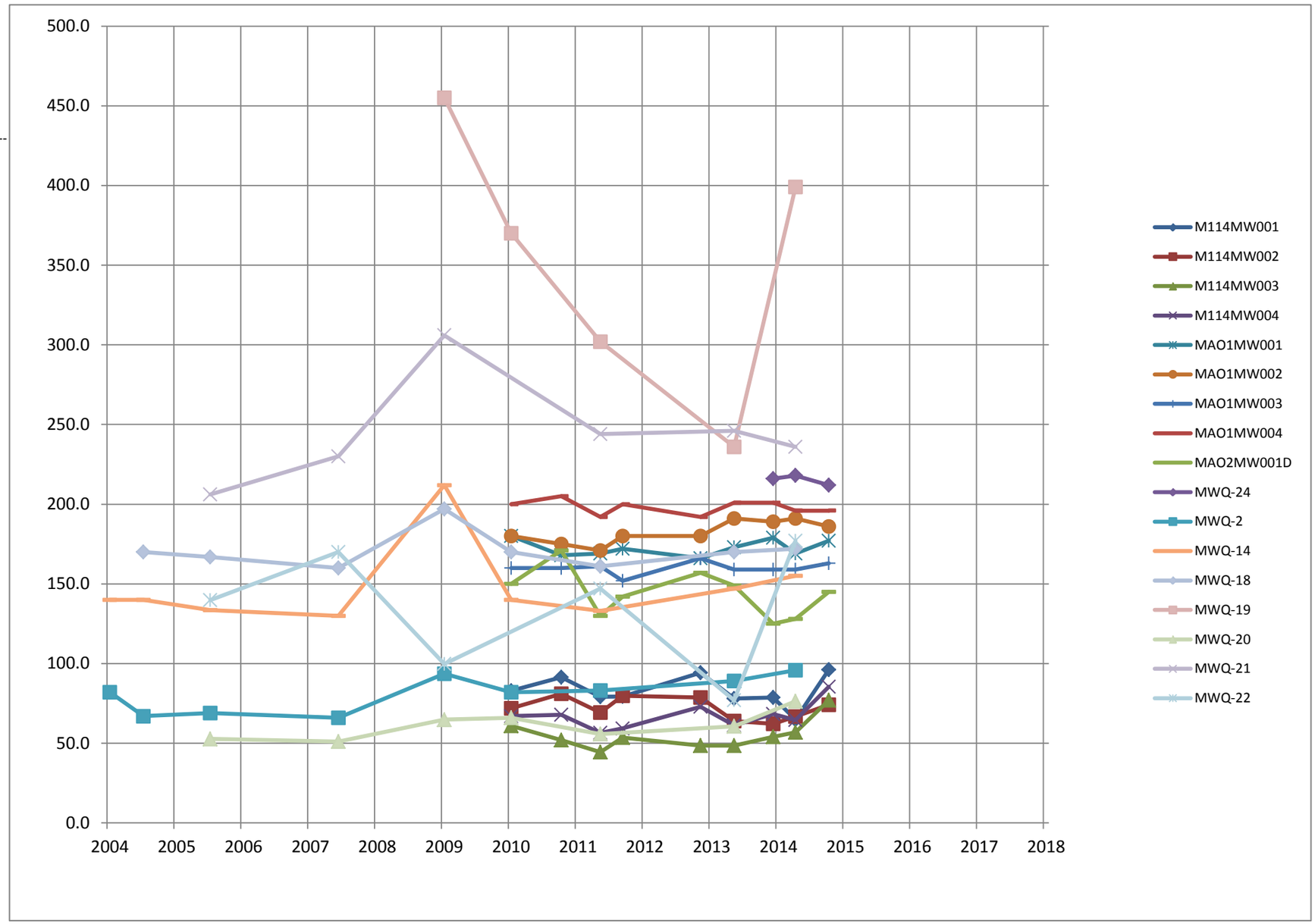
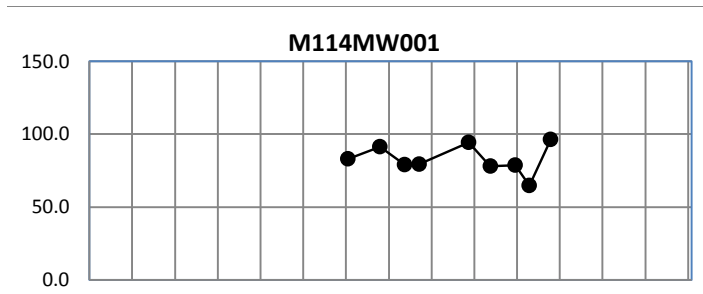
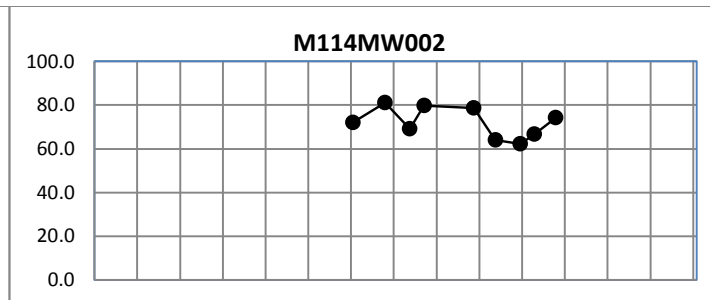
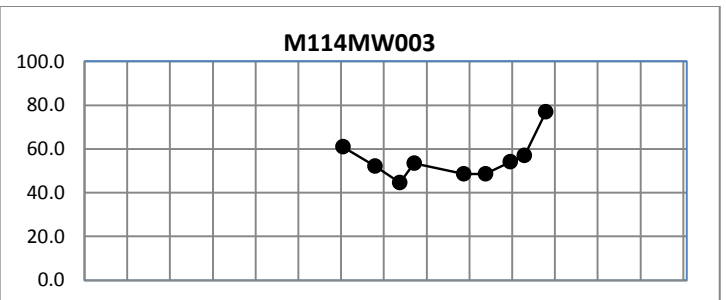


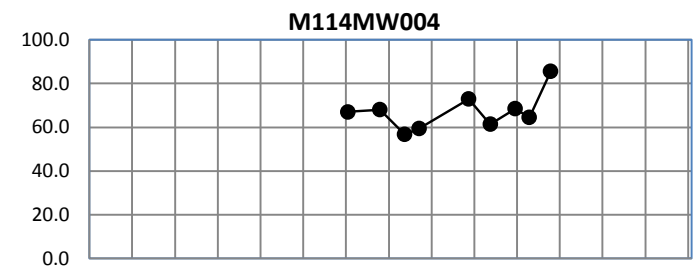
TABLE 6aa
ALKALINITY

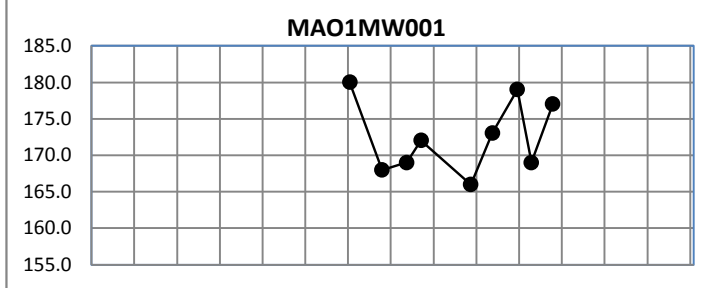
TABLE 6aa
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

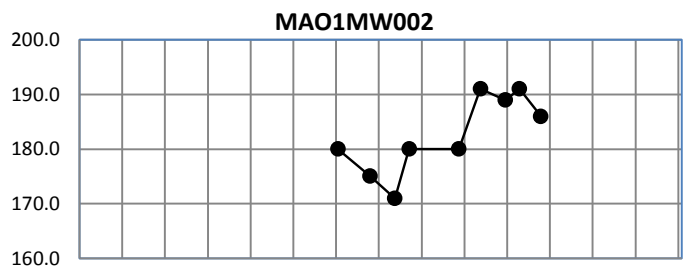


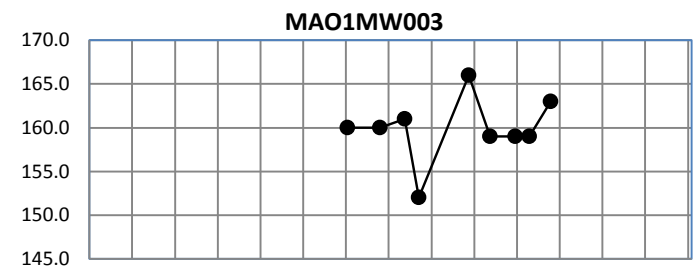


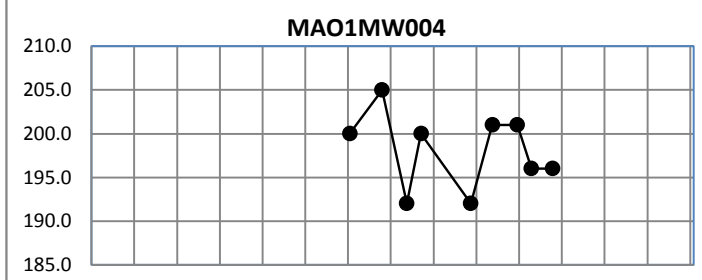


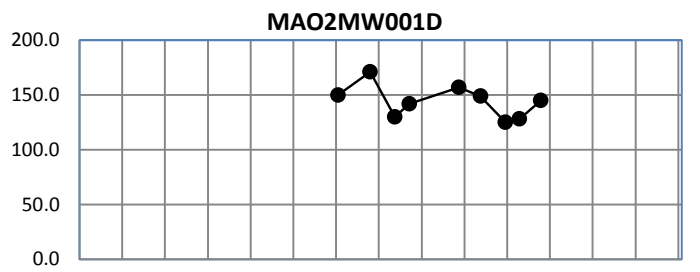


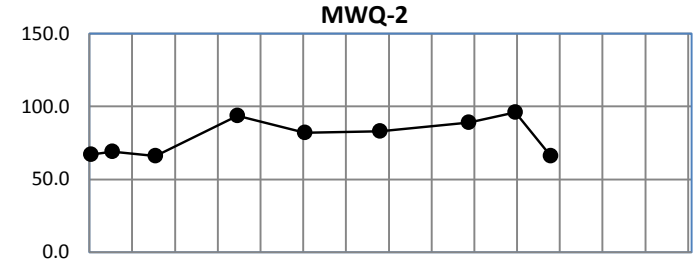


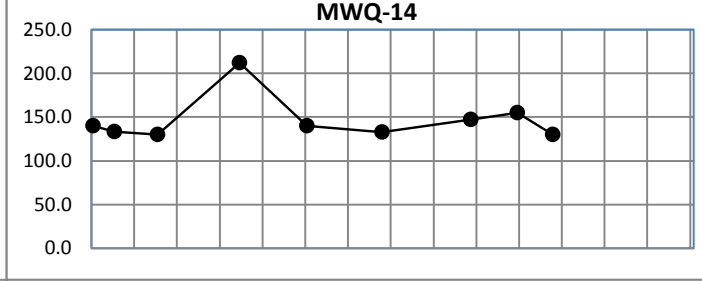


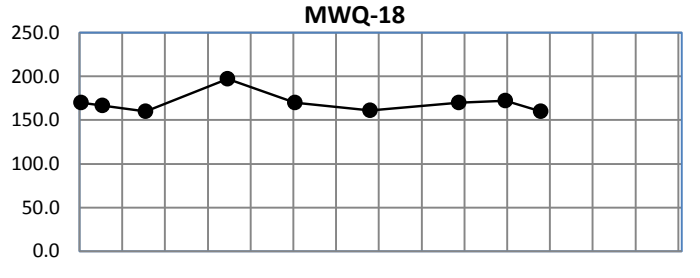


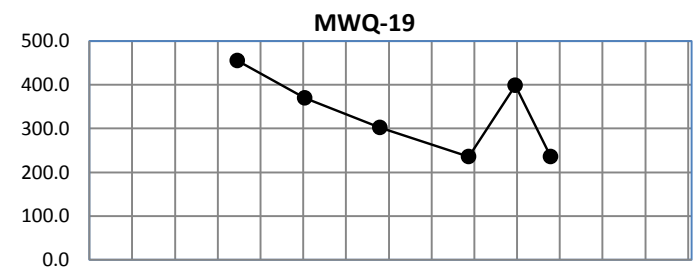


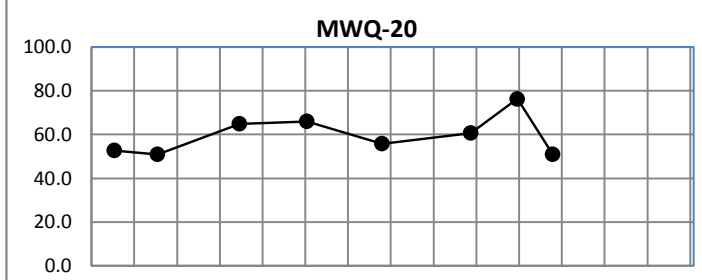


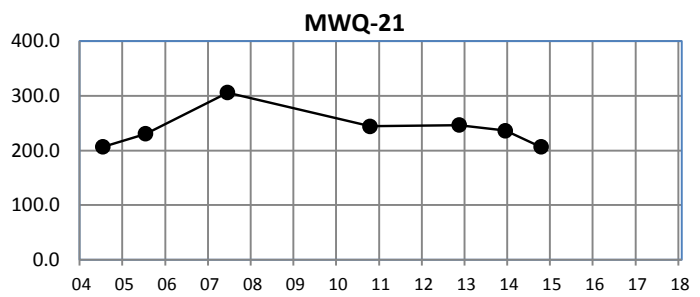


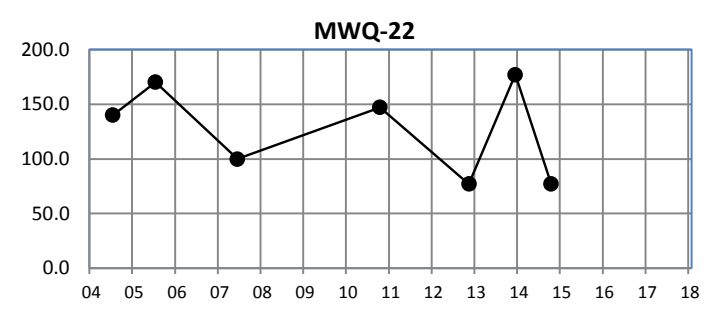


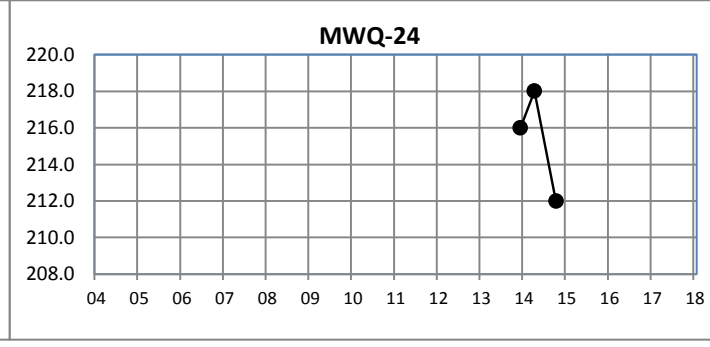












Notes:

Data in mg/L

TABLE 6aa
ALKALINITY

TABLE 6ab
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

DATE	Semiannual Network									
	SWMU 114				SWMU 130				SWMU 131	
	M114MW001	M114MW002	M114MW003	M114MW004	MAO1MW001	MAO1MW002	MAO1MW003	MAO1MW004	MAO2MW001D	MWQ-24
Jan-04										
Jul-04										
Jul-05										
Jun-07										
Jan-09	3,870	3,340	4,050	3,960	571	449	480	267	2,120	
Jan-10	3,000	3,200	4,100	4,100	630	470	500	270	1,500	
Oct-10	3,290	3,180	4,280	3,530	581	461	506	238	1,410	
May-11	3,280	3,660	4,550	4,180	651	473	537	269	2,190	
Sep-11	3,060	3,130	3,920	3,970	525	431	477	251	1,640	
Nov-12	3,320	3,610	4,590	4,400	501	511	531	276	1,780	
May-13	3,620	4,140	4,410	4,070	577	461	525	264	2,090	
Dec-13	3,940	4,220	4,810	4,260	572	403	563	239	2,770	5.36
Apr-14	3,750	3,800	4,080	3,930	563	439	529	270	2,190	5.87
Oct-14	3,100	2,120	4,180	4,010	523	443	477	255	2,290	5.39
Min	3000	2120	3920	3530	501	403	477	238	1410	5.36
Max	3940	4220	4810	4400	651	511	563	276	2770	5.87
Average	3423	3440	4297	4041	569	454	513	260	1998	5.54

DATE	Annual Network						
	MWQ-2	MWQ-14	MWQ-18	MWQ-19	MWQ-20	MWQ-21	MWQ-22
Jan-04	3,200	470					
Jul-04	3,300	480	45				
Jul-05	3,500	650	41		2,700	180	280
Jun-07	3,400	640	39		5,900	150	290
Jan-09							
Jan-10	3,300	630	35	1,800	5,500	120	770
Oct-10							
May-11	3,310	715	40.3	2,050	6,010	121	342
Sep-11							
Nov-12							
May-13	3,620	599	626.0	2,150	6,160	111	845
Dec-13							
Apr-14	3,440	686	37.6	1,850	6,260	113	388
Oct-14							
Min	3200	470	35	1800	2700	111	280
Max	3620	715	626	2150	6260	180	845
Average	3384	609	123	1963	5422	133	486

Notes:
Data in mg/L
NMED SSL Tapwater Screening Level: N/A
Red indicates exceedance
Blank cells indicate no data
Wells MWQ-3, -4, -5, -6, -7, -10, -23, and MWL-6 not sampled after spring 2011

TABLE 6ab
CHLORIDE

TABLE 6ab
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

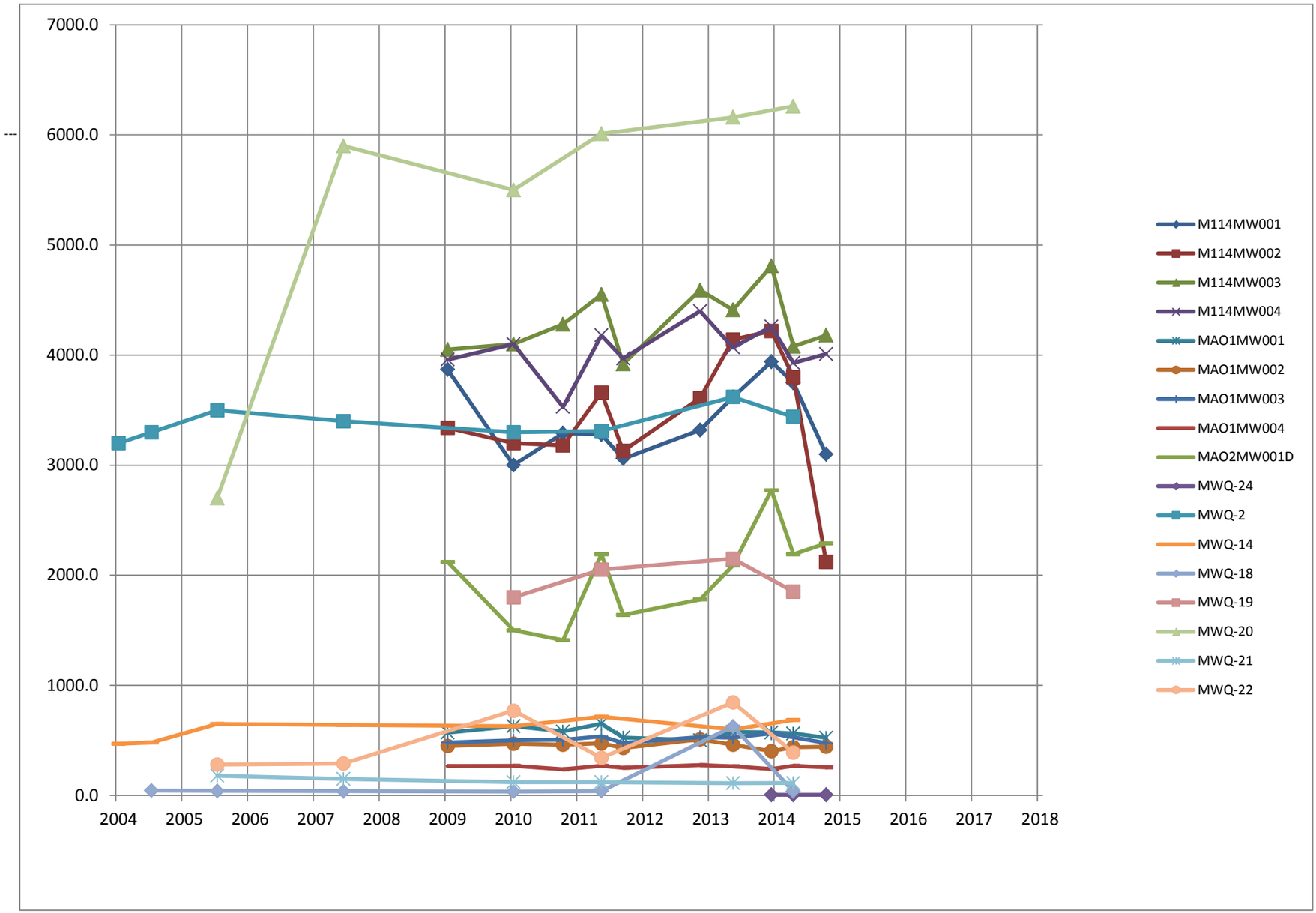
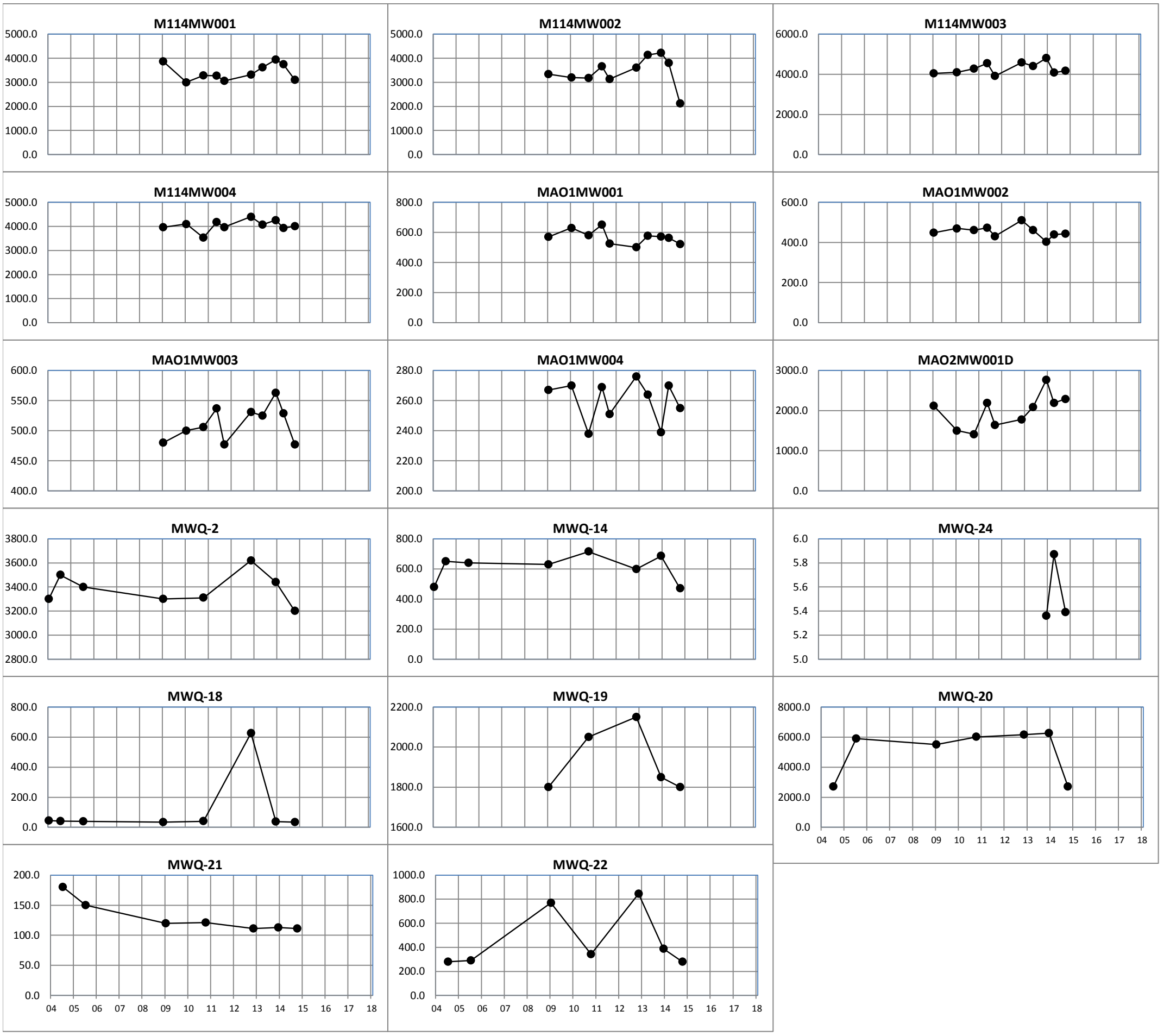


TABLE 6ab
CHLORIDE

TABLE 6ab
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO



Notes:

Data in mg/L

TABLE 6ab
CHLORIDE

TABLE 6ac
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

DATE	Semiannual Network									
	SWMU 114				SWMU 130				SWMU 131	
	M114MW001	M114MW002	M114MW003	M114MW004	MAO1MW001	MAO1MW002	MAO1MW003	MAO1MW004	MAO2MW001D	MWQ-24
Jan-04										
Jul-04										
Jul-05										
Jun-07										
Jan-09										
Jan-10	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	
Oct-10	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	
May-11	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	0.0013	<D.L.	
Sep-11	<D.L.	<D.L.	0.0009	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	
Nov-12	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	
May-13	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	*0.0005*	
Dec-13	<D.L.	*0.0007*	*0.0006*	<D.L.	<D.L.	<D.L.	<D.L.	*0.0007*	<D.L.	<D.L.
Apr-14	<D.L.	<D.L.	<D.L.	<D.L.	0.0011	<D.L.	**0.0033**	0.0008	<D.L.	<D.L.
Oct-14	**0.0023**	0.0013	0.0005	0.0007	**0.0015**	0.0014	**0.0025**	**0.0020**	<D.L.	0.0014
Min	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Max	0.002	0.001	0.001	0.001	0.002	0.001	0.003	0.002	0.001	
Average	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	

DATE	Annual Network						
	MWQ-2	MWQ-14	MWQ-18	MWQ-19	MWQ-20	MWQ-21	MWQ-22
Jan-04							
Jul-04							
Jul-05							
Jun-07							
Jan-09							
Jan-10	<D.L.	**0.0026**	**0.0051**	**0.0067**	**0.0041**	**0.0024**	**0.0029**
Oct-10							
May-11	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Sep-11							
Nov-12							
May-13	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	*0.0007*
Dec-13							
Apr-14	**0.0040**	**0.0029**	**0.0022**	**0.0017**	**0.0032**	**0.0031**	*0.0008*
Oct-14							
Min	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Max	0.004	0.003	0.005	0.007	0.004	0.003	0.003
Average	0.001	0.001	0.002	0.002	0.002	0.001	0.001

Notes:

Data in mg/L

NMED SSL Tapwater Screening Level: 0.00146 mg/L

Red indicates exceedance

Blank cells indicate no data

Wells MWQ-3, -4, -5, -6, -7, -10, -23, and MWL-6 not sampled after spring 2011

Due to a preponderance of no detects trends are not plotted

TABLE 6ac
CYANIDE

TABLE 6ad
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

DATE	Semiannual Network									
	SWMU 114				SWMU 130				SWMU 131	
	M114MW001	M114MW002	M114MW003	M114MW004	MAO1MW001	MAO1MW002	MAO1MW003	MAO1MW004	MAO2MW001D	MWQ-24
Jan-04										
Jul-04										
Jul-05										
Jun-07										
Jan-09										
Jan-10	1.4	0.59	1.1	1.0	0.35	0.50	0.26	0.93	6.4	
Oct-10	1.11	0.569	1.06	0.772	0.306	0.545	0.258	0.768	6.08	
May-11	0.901	0.375	0.719	0.90	0.233	0.325	0.163	0.615	1.560	
Sep-11	0.899	0.245	0.430	0.511	0.116	0.207	0.085	0.339	1.71	
Nov-12	1.190	0.528	0.988	0.825	0.290	0.443	0.214	0.732	5.05	
May-13	1.340	0.293	1.140	0.834	0.320	0.452	0.207	0.981	6.11	
Dec-13	0.925	0.226	0.843	0.538	0.249	0.411	0.175	0.672	2.40	2.22
Apr-14	0.965	0.224	0.723	0.532	0.209	0.368	0.150	0.504	2.24	1.88
Oct-14	1.260	0.371	1.080	0.857	0.289	0.458	0.222	0.811	3.56	3.76
Min	0.90	0.22	0.43	0.51	0.12	0.21	0.09	0.34	1.56	1.88
Max	1.40	0.59	1.14	1.00	0.35	0.55	0.26	0.98	6.40	3.76
Average	1.11	0.38	0.90	0.75	0.26	0.41	0.19	0.71	3.90	2.62

DATE	Annual Network						
	MWQ-2	MWQ-14	MWQ-18	MWQ-19	MWQ-20	MWQ-21	MWQ-22
Jan-04							
Jul-04							
Jul-05							
Jun-07							
Jan-09	<D.L.	2.630	0.534	0.627	0.110	1.860	0.873
Jan-10	<D.L.	2.6	0.49	<D.L.	<D.L.	2.4	<D.L.
Oct-10							
May-11	0.244	1.59	0.372	<D.L.	<D.L.	2.44	0.309
Sep-11							
Nov-12							
May-13	0.237	2.74	0.513	<D.L.	<D.L.	3.90	<D.L.
Dec-13							
Apr-14	0.157	1.29	0.298	<D.L.	0.030	1.47	<D.L.
Oct-14							
Min	0.00	1.29	0.30	0.00	0.00	1.47	0.00
Max	0.24	2.74	0.53	0.63	0.11	3.90	0.87
Average	0.13	2.17	0.44	0.13	0.03	2.41	0.24

Notes:
Data in mg/L
NMED SSL Tapwater Screening Level: 31.59 mg/L-N
Red indicates exceedance
Blank cells indicate no data
Wells MWQ-3, -4, -5, -6, -7, -10, -23, and MWL-6 not sampled after spring 2011

TABLE 6ad
NITRATE

TABLE 6ad
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

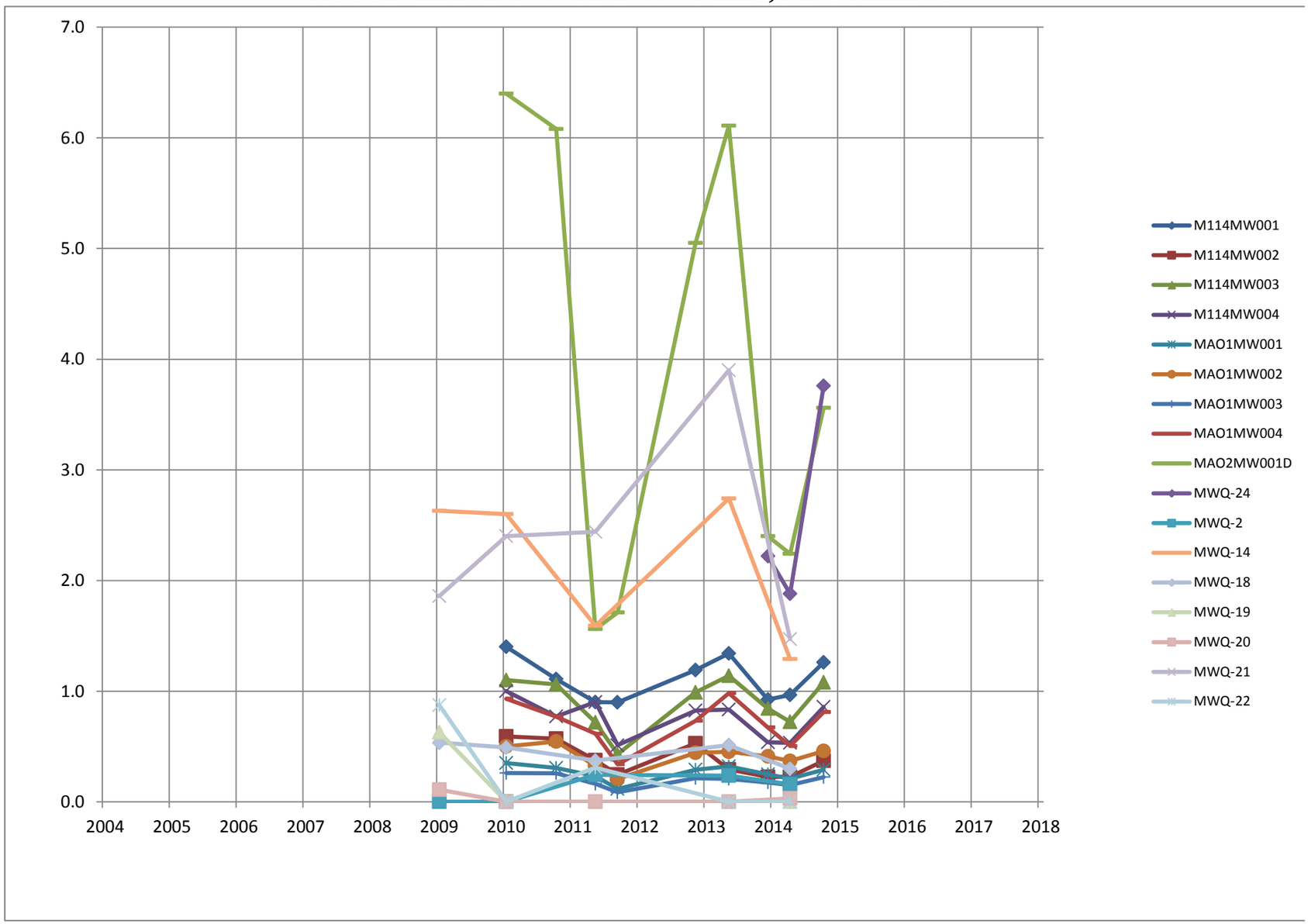
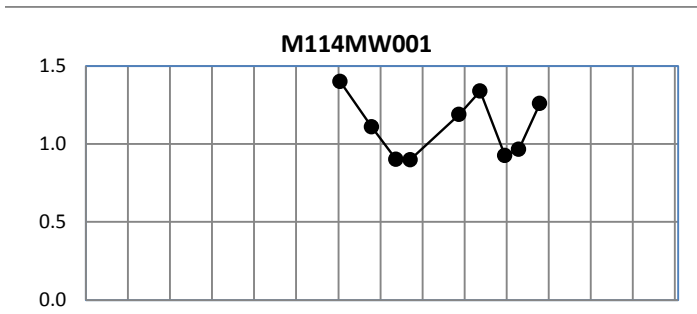
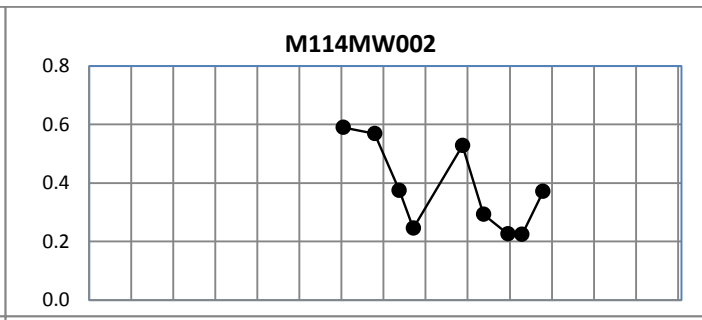
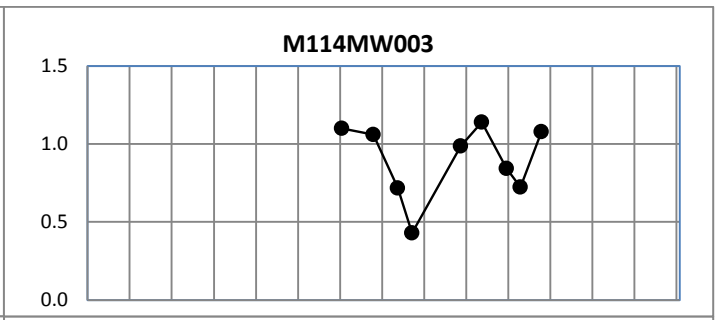


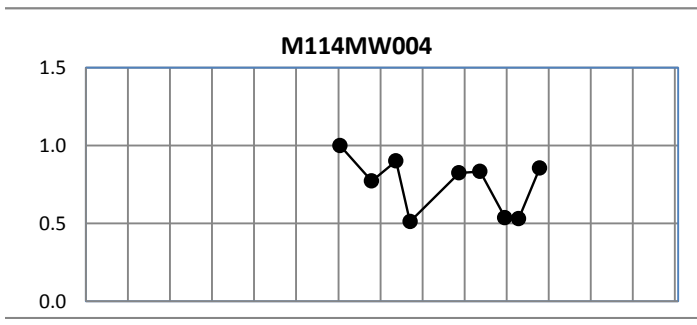
TABLE 6ad
NITRATE

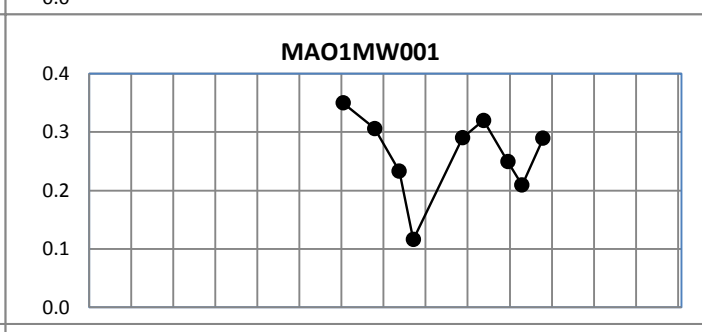
TABLE 6ad
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

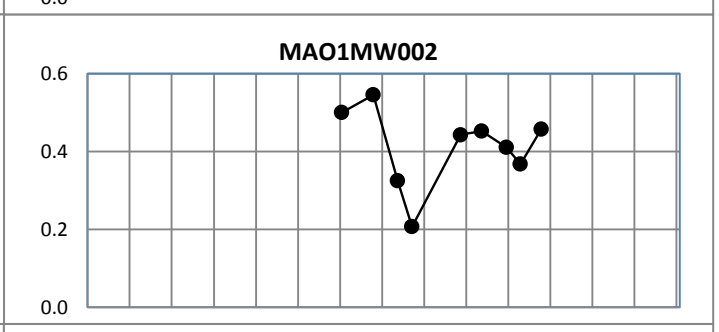


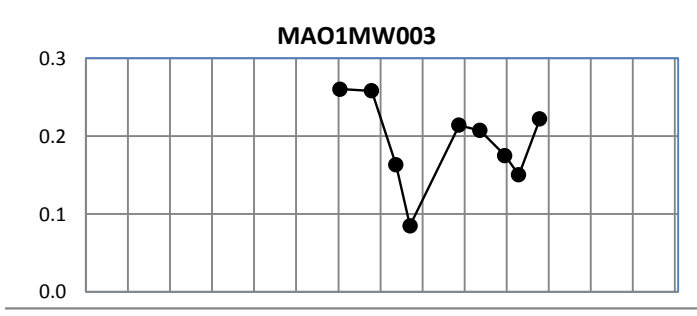


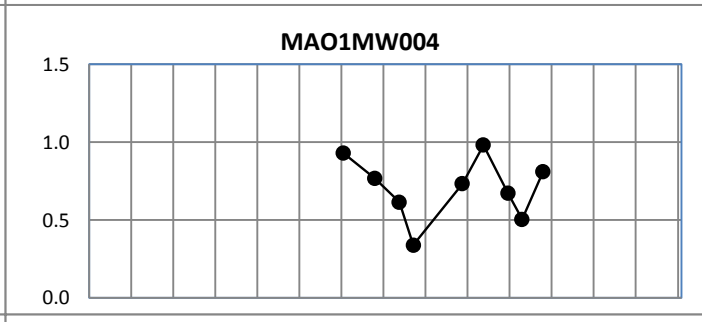


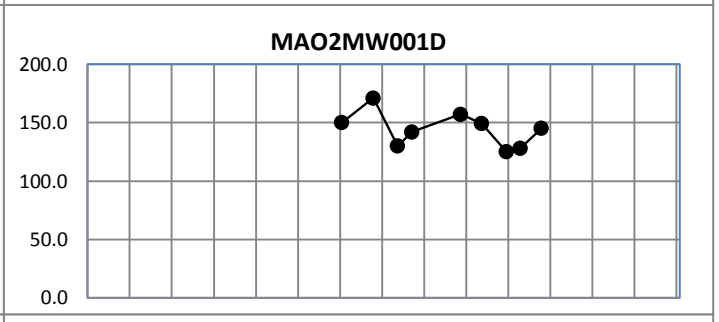


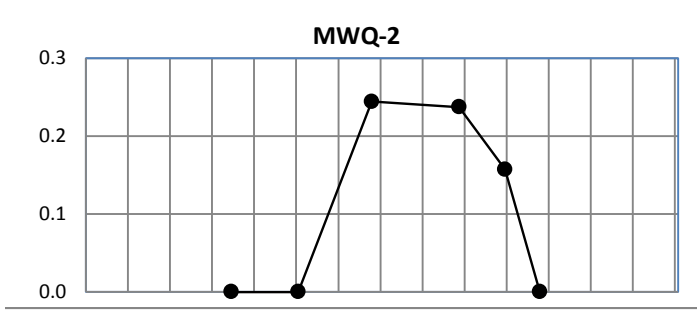


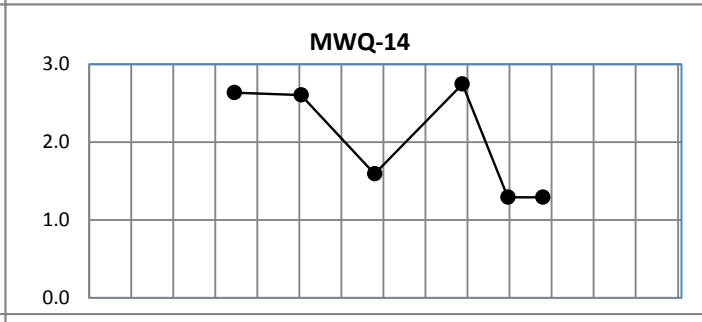


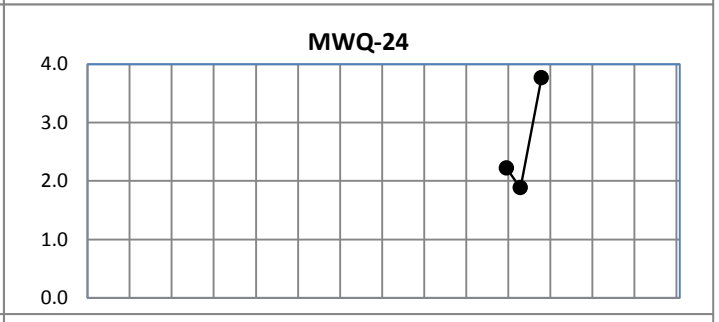


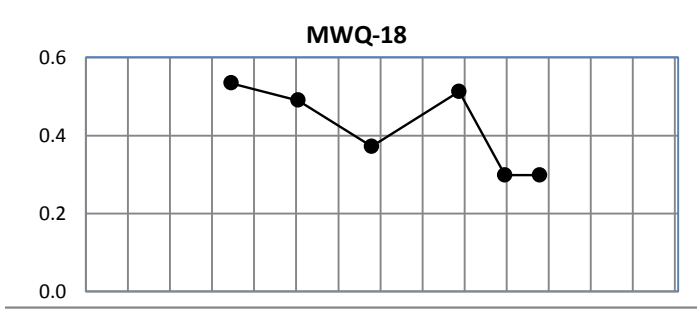


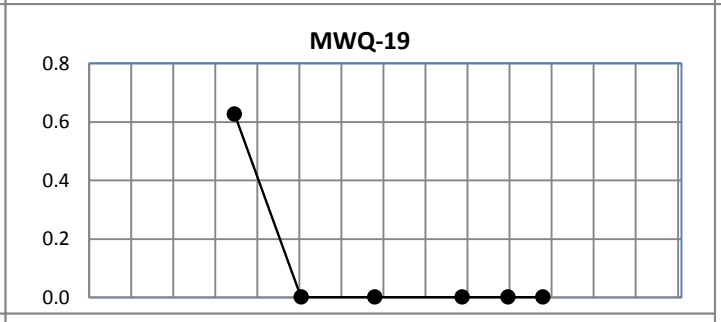


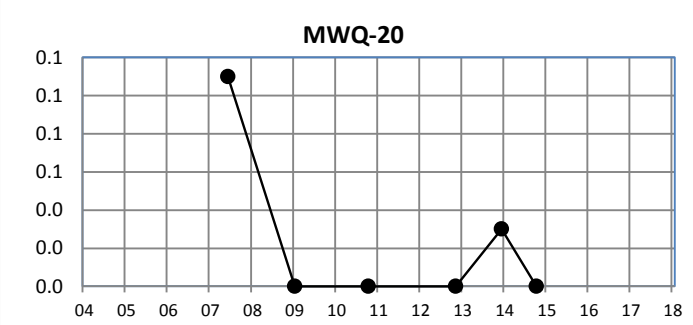


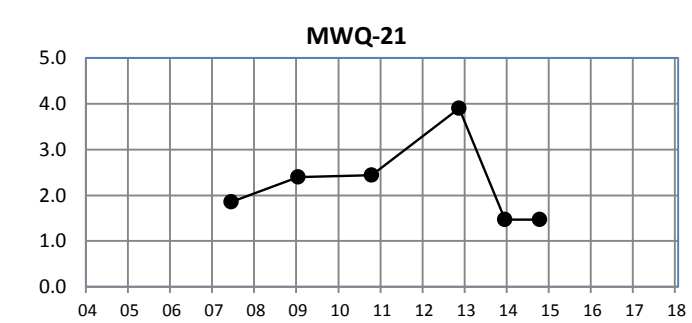


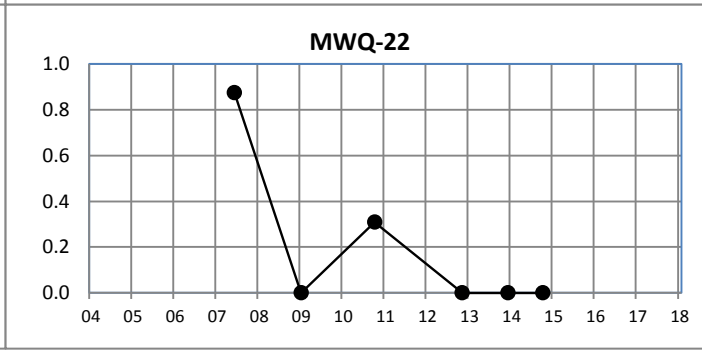












Notes:

Data in mg/L

TABLE 6ad
NITRATE

TABLE 6ae
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

DATE	Semiannual Network									
	SWMU 114				SWMU 130				SWMU 131	
	M114MW001	M114MW002	M114MW003	M114MW004	MAO1MW001	MAO1MW002	MAO1MW003	MAO1MW004	MAO2MW001D	MWQ-24
Jan-04										
Jul-04										
Jul-05										
Jun-07										
Jan-09										
Jan-10	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	
Oct-10	0.015	0.006	<D.L.	0.017	<D.L.	<D.L.	0.004	<D.L.	0.047	
May-11	<D.L.	0.004	0.004	0.004	0.004	<D.L.	<D.L.	<D.L.	0.004	
Sep-11	<D.L.	<D.L.	0.005	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	0.035	
Nov-12	0.016	0.019	0.018	0.020	0.009	<D.L.	0.011	0.011	0.015	
May-13	<D.L.	<D.L.	<D.L.	*0.006*	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	
Dec-13	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Apr-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Oct-14	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	0.008	<D.L.	<D.L.	<D.L.	<D.L.
Min	0	0	0	0	0	0	0	0	0	0
Max	0	0	0	0	0	0	0	0	0	0
Average	0	0	0	0	0	0	0	0	0	0

DATE	Annual Network						
	MWQ-2	MWQ-14	MWQ-18	MWQ-19	MWQ-20	MWQ-21	MWQ-22
Jan-04							
Jul-04							
Jul-05							
Jun-07							
Jan-09							
Jan-10	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.	<D.L.
Oct-10							
May-11	<D.L.	<D.L.	<D.L.	0.007	0.006	0.008	0.011
Sep-11							
Nov-12							
May-13	0.004	0.003	*0.006*	<D.L.	0.010	0.004	0.005
Dec-13							
Apr-14	<D.L.	<D.L.	<D.L.	0.006	0.022	<D.L.	<D.L.
Oct-14							
Min	0	0	0	0	0	0	0
Max	0	0	0	0	0	0	0
Average	0	0	0	0	0	0	0

Notes:
Data in mg/L
NMED SSL Tapwater Screening Level: 1.97 mg/L-N
Red indicates exceedance
Blank cells indicate no data
Wells MWQ-3, -4, -5, -6, -7, -10, -23, and MWL-6 not sampled after spring 2011

Due to a preponderance of no detects trends are not plotted

TABLE 6ae
NITRITE

TABLE 6af
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

DATE	Semiannual Network																			
	SWMU 114								SWMU 130								SWMU 131			
	M114MW001		M114MW002		M114MW003		M114MW004		MAO1MW001		MAO1MW002		MAO1MW003		MAO1MW004		MAO2MW001D		MWQ-24	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04																				
Jul-04																				
Jul-05																				
Jun-07																				
Jan-09	2.9		2.8		4.4		2.0		0.3		2.0		0.4		4.2		**19.0**			
Jan-10	3.4		2.7		4.0		2.9		0.30		1.7		0.37		4.3		**21**			
Oct-10	<D.L.		<D.L.		<D.L.		<D.L.		<D.L.		<D.L.		<D.L.		<D.L.		**23.9**			
May-11	3.27		2.80		4.10		2.79		0.369		2.05		1.03		9.8		**22.4**			
Sep-11	3.14	2.70	2.78	2.77	4.06	3.29	3.21	2.54	3.57	2.66	1.88	1.49	4.13	2.98	4.07	3.53	**23.8**	**19.6**	**25.0**	
Nov-12	3.13		**28.2**		3.92		2.92		0.409		1.40		0.395		13.10		**21.5**			
May-13	4.46		1.91		4.26		2.72		0.41		1.88		0.429		4.83		**23.50**			
Dec-13	3.47		2.06		4.02		2.80		0.37		2.08		0.415		4.80		**21.20**		0.19	
Apr-14	1.93		1.39		2.27		1.49		0.17		1.42		0.2		2.38		11.20		<D.L.	
Oct-14	3.01		2.29		3.38		2.33		0.31		1.51		0.335		3.81		**14.90**		0.14	
Min	0.0	2.7	0.0	2.8	0.0	3.3	0.0	2.5	0.0	2.7	0.0	1.5	0.0	3.0	0.0	3.5	11.2	19.6	0.0	
Max	4.5	2.7	28.2	2.8	4.4	3.3	3.2	2.5	3.6	2.7	2.1	1.5	4.1	3.0	13.1	3.5	23.9	19.6	25.0	
Avg	2.9	2.7	4.7	2.8	3.4	3.3	2.3	2.5	0.6	2.7	1.6	1.5	0.8	3.0	5.1	3.5	20.2	19.6	6.3	

DATE	Annual Network													
	MWQ-2		MWQ-14		MWQ-18		MWQ-19		MWQ-20		MWQ-21		MWQ-22	
	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss	Total	Diss
Jan-04	<D.L.		4.3											
Jul-04	<D.L.		3.5		5.9									
Jul-05														
Jun-07	<D.L.		4.8		5.4				<D.L.		7.0		1.5	
Jan-09														
Jan-10	<D.L.		4.6		4.7		<D.L.		0.033		7.4		<D.L.	
Oct-10														
May-11	0.198		4.52		10.8		0.198		0.495		8.27		1.48	
Sep-11														
Nov-12														
May-13	0.495		5.15		5.14		0.64		0.56		10.50		0.10	
Dec-13														
Apr-14	<D.L.		2.80		2.83		<D.L.		<D.L.		5.59		<D.L.	
Oct-14														
Min	0.0		2.8		2.8		0.0		0.0		5.6		0.0	
Max	0.5		5.2		10.8		0.6		0.6		10.5		1.5	
Avg	0.1		4.2		5.8		0.2		0.2		7.8		0.6	

Notes:

Data in mg/L

NMED SSL Tapwater Screening Level: 13.82 mg/L

Red indicates exceedance

Blank cells indicate no data

Wells MWQ-3, -4, -5, -6, -7, -10, -23, and MWL-6 not sampled after spring 2011

TABLE 6af
PERCHLORATE

TABLE 6af
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

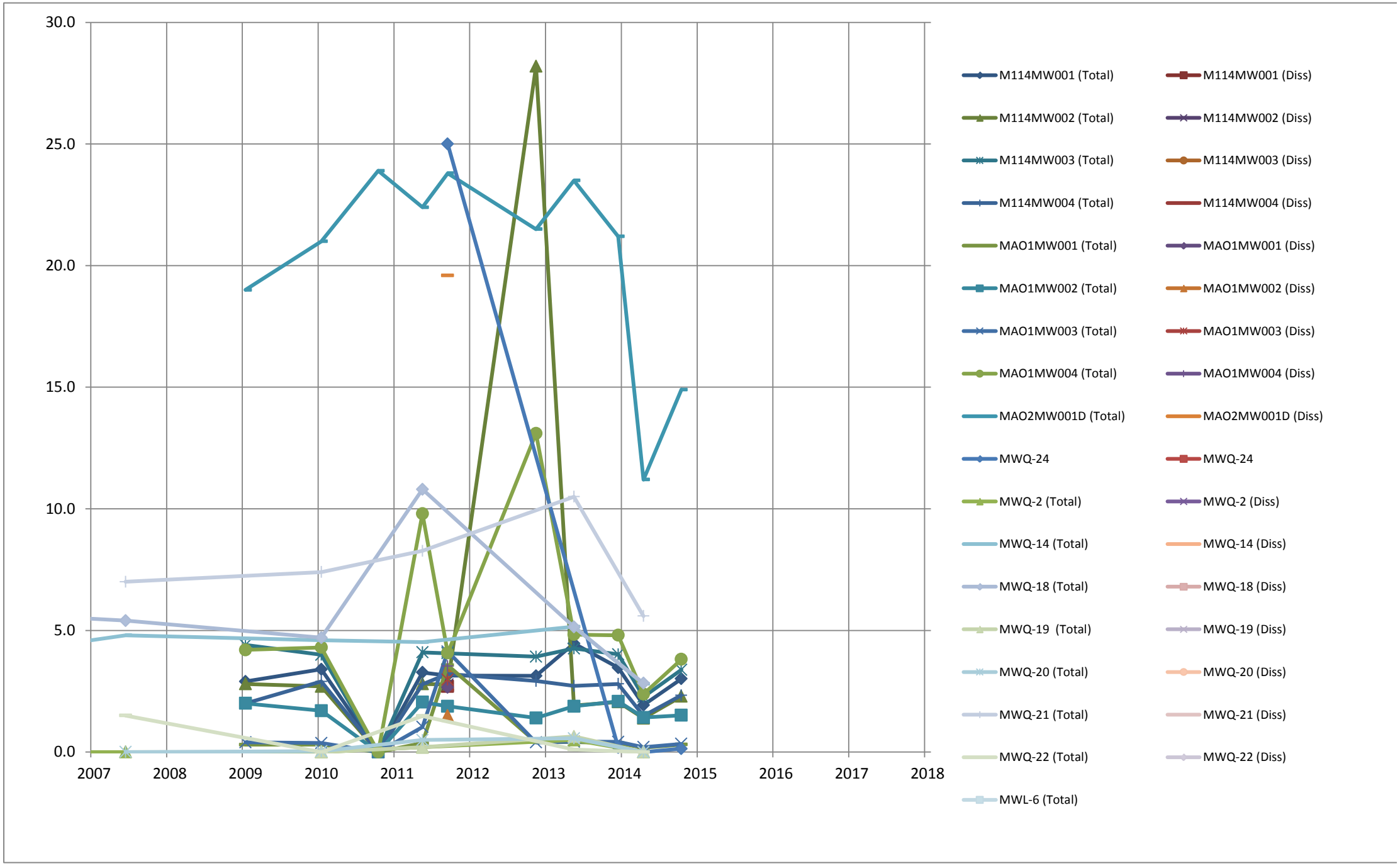
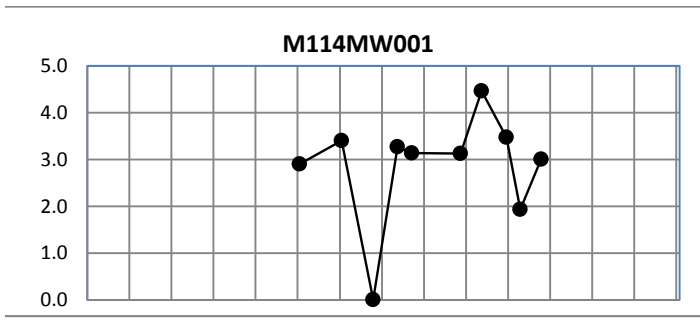
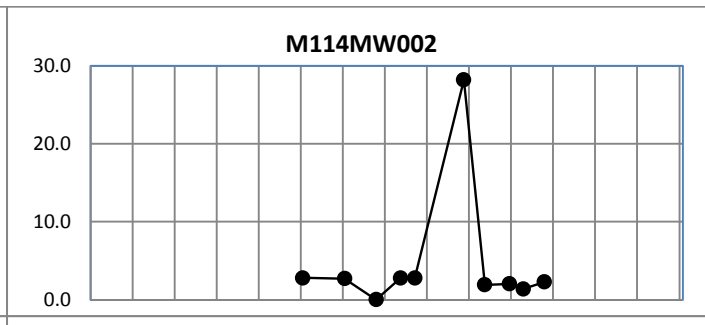
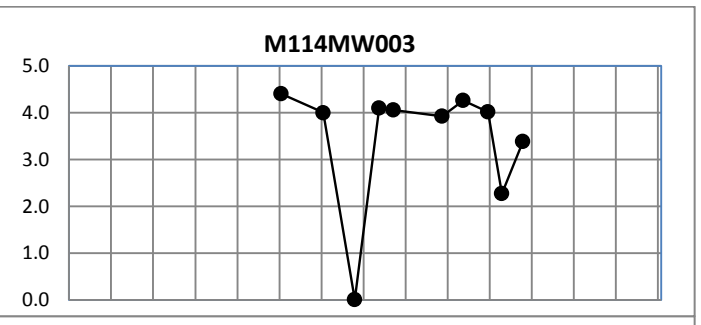


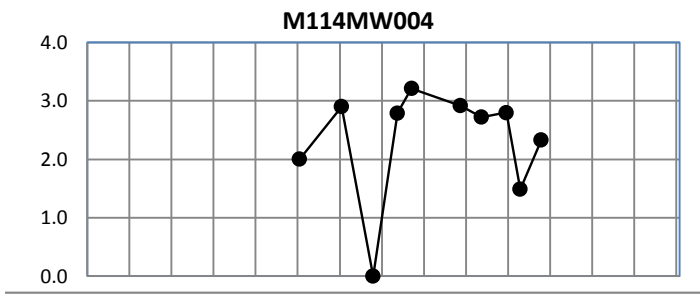
TABLE 6af
PERCHLORATE

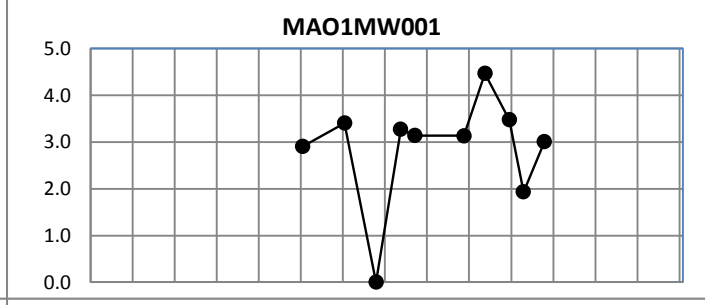
TABLE 6af
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

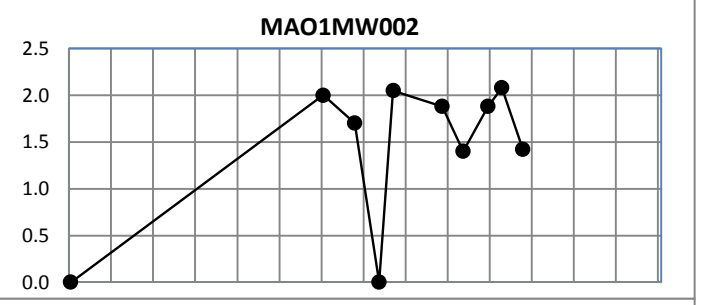


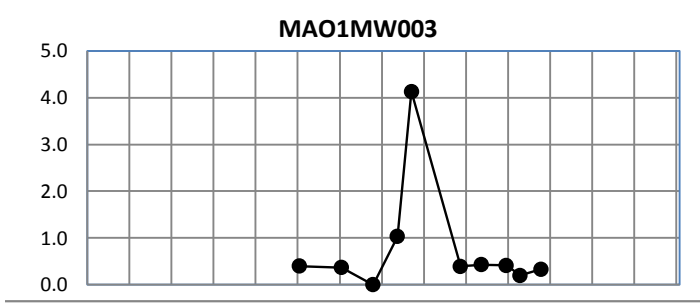


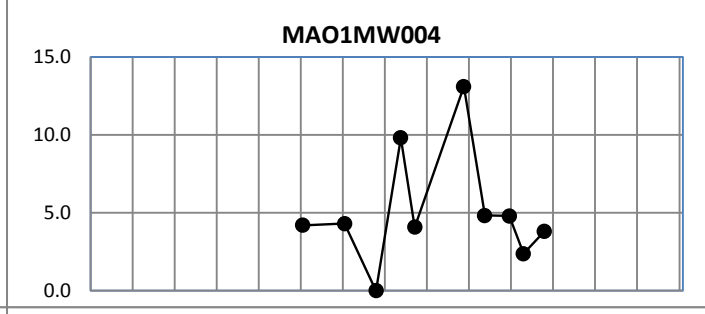


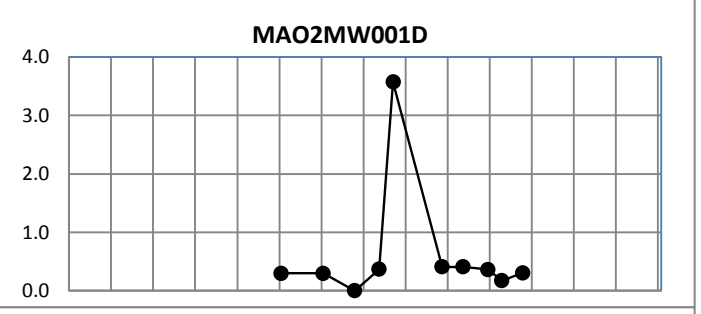


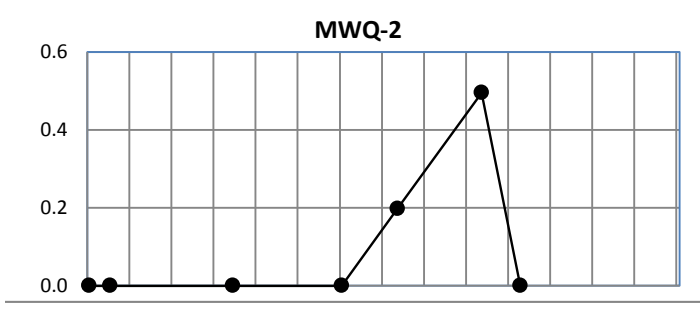


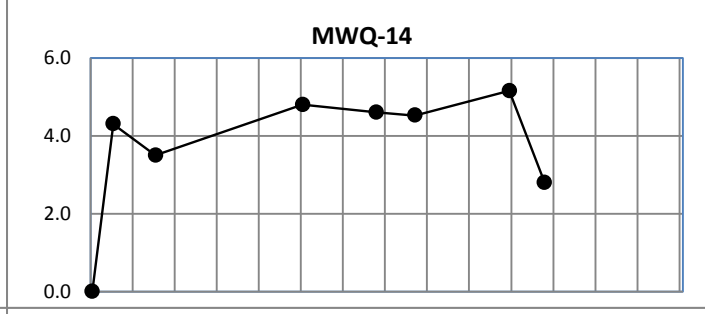


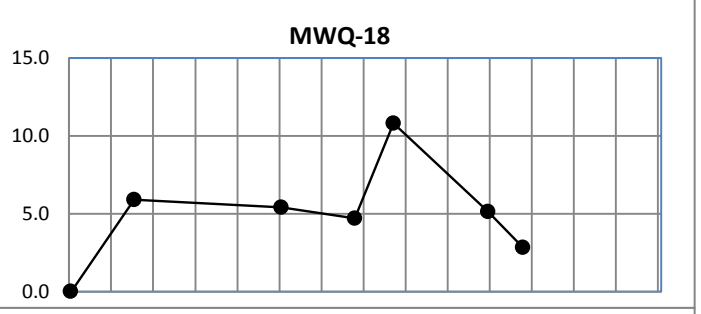


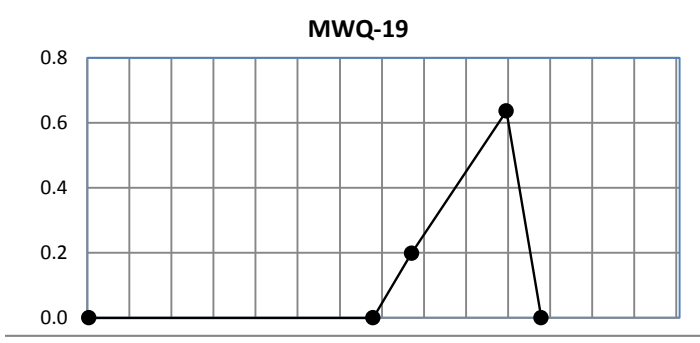


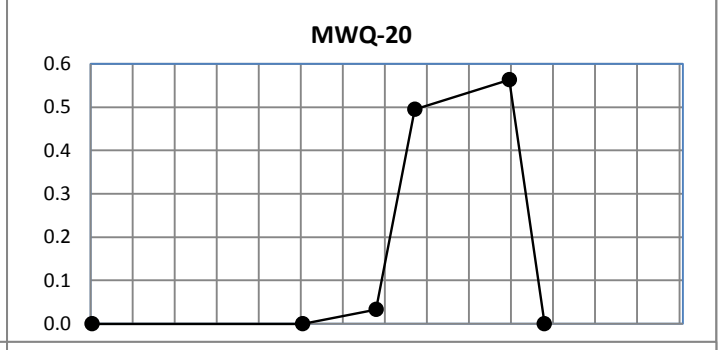


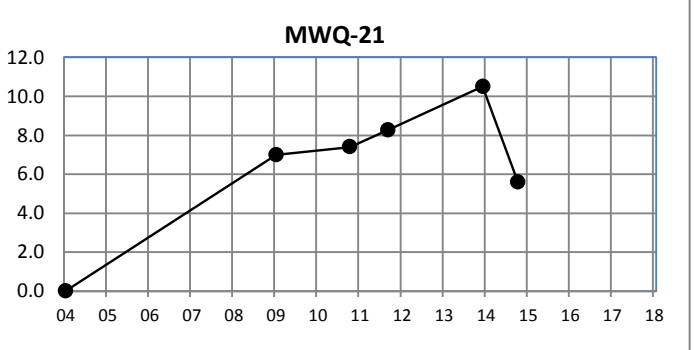


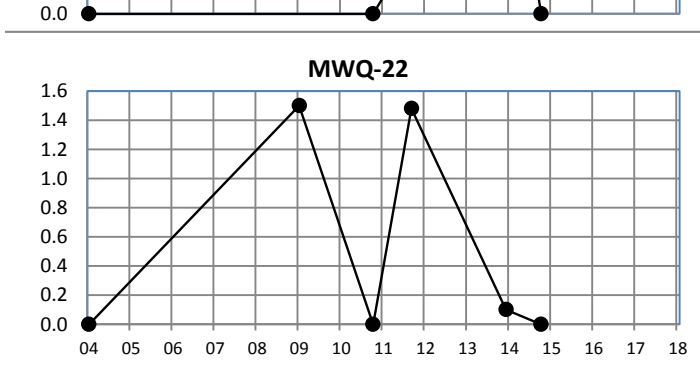












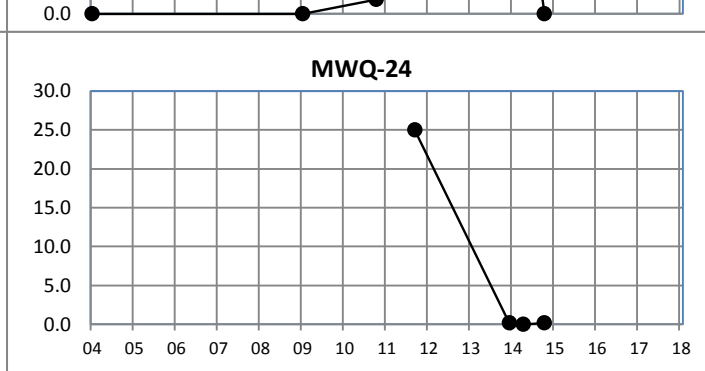


TABLE 6af
PERCHLORATE

TABLE 6ag
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

DATE	Semiannual Network									
	SWMU 114				SWMU 130				SWMU 131	
	M114MW001	M114MW002	M114MW003	M114MW004	MAO1MW001	MAO1MW002	MAO1MW003	MAO1MW004	MAO2MW001D	MWQ-24
Jan-04										
Jul-04										
Jul-05										
Jun-07										
Jan-09	2,010	1,820	2,060	1,980	663	534	552	351	2,020	
Jan-10	2,000	1,900	2,300	2,200	740	550	570	340	1,900	
Oct-10	2,360	2,140	2,360	2,040	691	635	677	376	1,980	
May-11	2,140	2,130	2,460	2,110	704	544	616	352	2,130	
Sep-11	1,810	1,580	1,880	1,630	564	514	524	329	1,860	
Nov-12	2,200	2,200	2,460	2,290	506	589	599	364	2,080	
May-13	2,120	2,050	2,280	2,130	674	536	592	327	2,040	
Dec-13	2,120	1,940	2,410	2,050	665	495	507	313	2,290	60.4
Apr-14	2,010	1,980	2,170	2,040	678	527	591	345	2,070	62.1
Oct-14	1,990	1,120	2,240	2,080	617	534	549	333	2,230	51.7
Min	1810	1120	1880	1630	506	495	507	313	1860	52
Max	2360	2200	2460	2290	740	635	677	376	2290	62
Average	2076	1886	2262	2055	650	546	578	343	2060	58

DATE	Annual Network						
	MWQ-2	MWQ-14	MWQ-18	MWQ-19	MWQ-20	MWQ-21	MWQ-22
Jan-04	1,200	740					
Jul-04	1,300	770	110				
Jul-05	1,300	900	110		730	730	220
Jun-07	1,500	960	110		1,800	690	260
Jan-09							
Jan-10	1,400	950	110	1,500	1,600	570	420
Oct-10							
May-11	1,350	994	110	1,530	1,630	476	233
Sep-11							
Nov-12							
May-13	1,410	961	109	1,380	1,710	428	415
Dec-13							
Apr-14	1,430	1,030	116	1,350	1,840	424	242
Oct-14							
Min	1200	740	109	1350	730	424	220
Max	1500	1030	116	1530	1840	730	420
Average	1361	913	111	1440	1552	553	298

Notes:
Data in mg/L
NMED SSL Tapwater Screening Level: N/A
Red indicates exceedance
Blank cells indicate no data
Wells MWQ-3, -4, -5, -6, -7, -10, -23, and MWL-6 not sampled after spring 2011

TABLE 6ag
SULFATE

TABLE 6ag
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

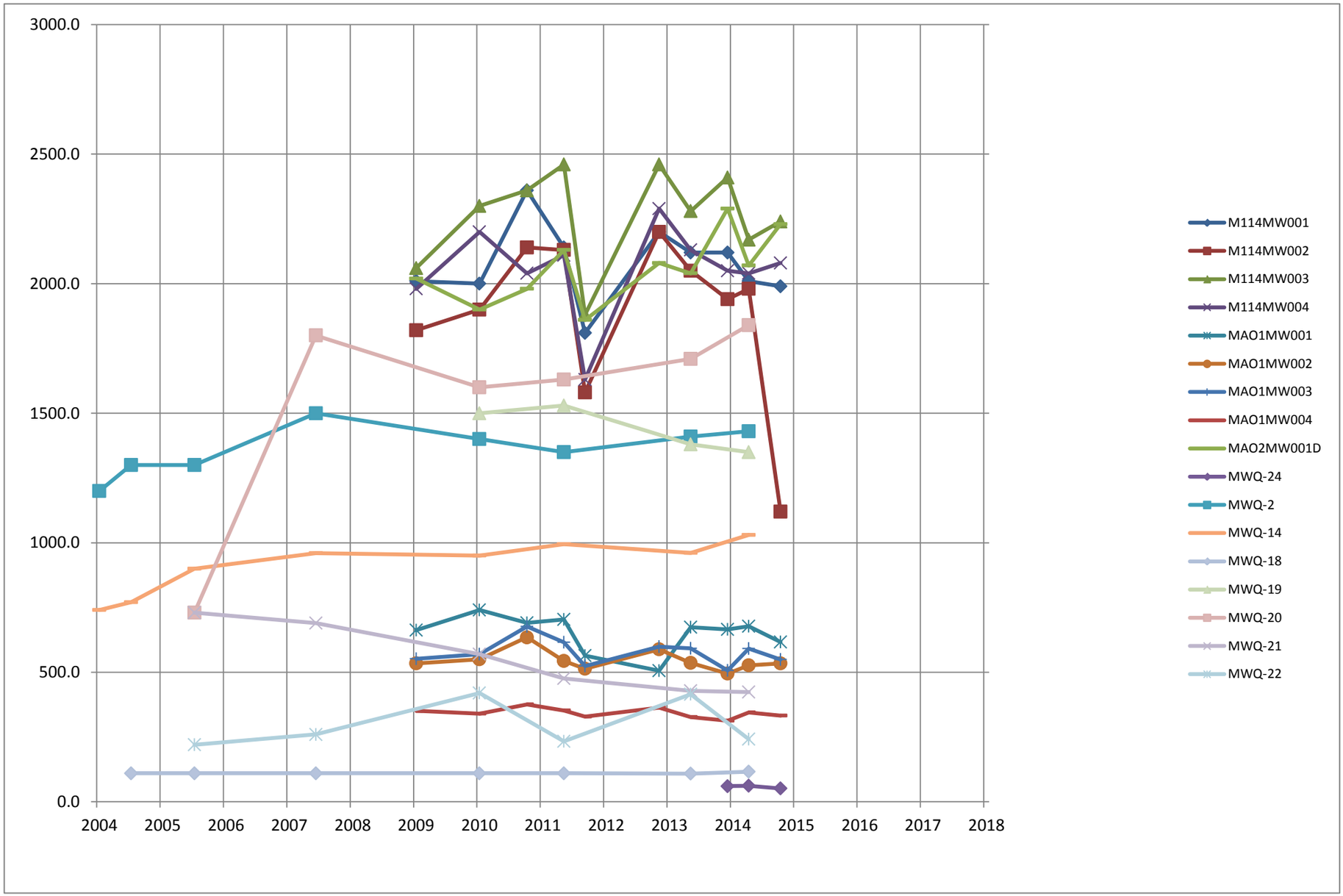
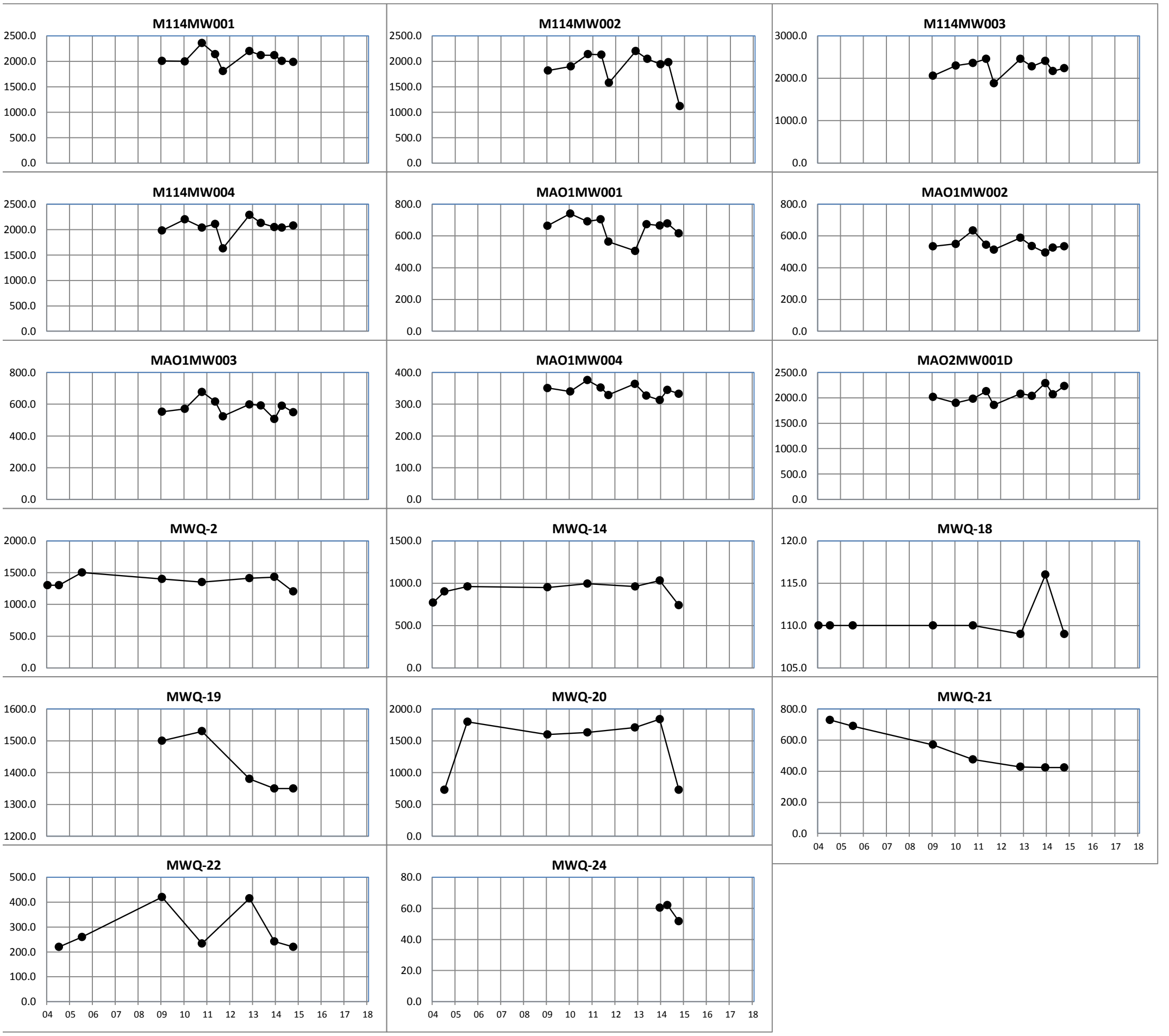


TABLE 6ag
SULFATE

TABLE 6ag
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO



Notes:

Data in mg/L

TABLE 6ah
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

DATE	Semiannual Network									
	SWMU 114				SWMU 130				SWMU 131	
	M114MW001	M114MW002	M114MW003	M114MW004	MAO1MW001	MAO1MW002	MAO1MW003	MAO1MW004	MAO2MW001D	MWQ-24
Jan-04										
Jul-04										
Jul-05										
Jun-07										
Jan-09										
Jan-10	7,500	7,500	9,300	8,500	2,100	1,700	1,800	1,200	5,200	
Oct-10	7,800	7,980	8,940	8,830	2,100	1,780	1,820	1,110	5,240	
May-11	8,270	7,800	9,540	7,000	1,980	1,780	1,760	1,110	6,290	
Sep-11	7,640	7,610	9,870	9,500	1,990	1,720	1,790	1,130	5,620	
Nov-12	7,810	7,830	9,310	9,300	1,990	1,750	1,780	1,050	5,670	
May-13	8,820	8,890	9,900	9,460	1,960	1,780	1,750	1,140	5,400	
Dec-13	9,840	8,340	7,500	8,980	1,900	1,720	1,770	1,130	6,400	349
Apr-14	8,840	7,810	9,310	7,950	1,900	1,630	1,660	888	5,730	270
Oct-14	8,190	8,680	9,390	8,940	1,890	1,710	1,790	1,140	7,040	344
Min	7500	7500	7500	7000	1890	1630	1660	888	5200	270
Max	9840	8890	9900	9500	2100	1780	1820	1200	7040	349
Average	8301	8049	9229	8718	1979	1730	1769	1100	5843	321

DATE	Annual Network						
	MWQ-2	MWQ-14	MWQ-18	MWQ-19	MWQ-20	MWQ-21	MWQ-22
Jan-04	7,000	2,400					
Jul-04	7,400	2,400	440				
Jul-05	7,400	2,500	450		5,100	1,700	910
Jun-07	7,200	2,400	470		12,000	1,600	1,000
Jan-09	7,360	2,600	445	4,700	12,100	1,510	1,850
Jan-10	6,800	2,500	460	5,100	10,000	1,300	1,800
Oct-10							
May-11	7,120	2,670	520	5,500	11,900	900	936
Sep-11							
Nov-12							
May-13	6,630	1,940	404	5,360	11,800	1,030	1,970
Dec-13							
Apr-14	6,500	2,720	364	4,070	9,870	970	920
Oct-14							
Min	6500	1940	364	4070	5100	900	910
Max	7400	2720	520	5500	12100	1700	1970
Average	7046	2459	444	4946	10396	1287	1341

Notes:
Data in mg/L
NMED SSL Tapwater Screening Level: N/A
Red indicates exceedance
Blank cells indicate no data
Wells MWQ-3, -4, -5, -6, -7, -10, -23, and MWL-6 not sampled after spring 2011

TABLE 6ah
TDS

TABLE 6ah
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

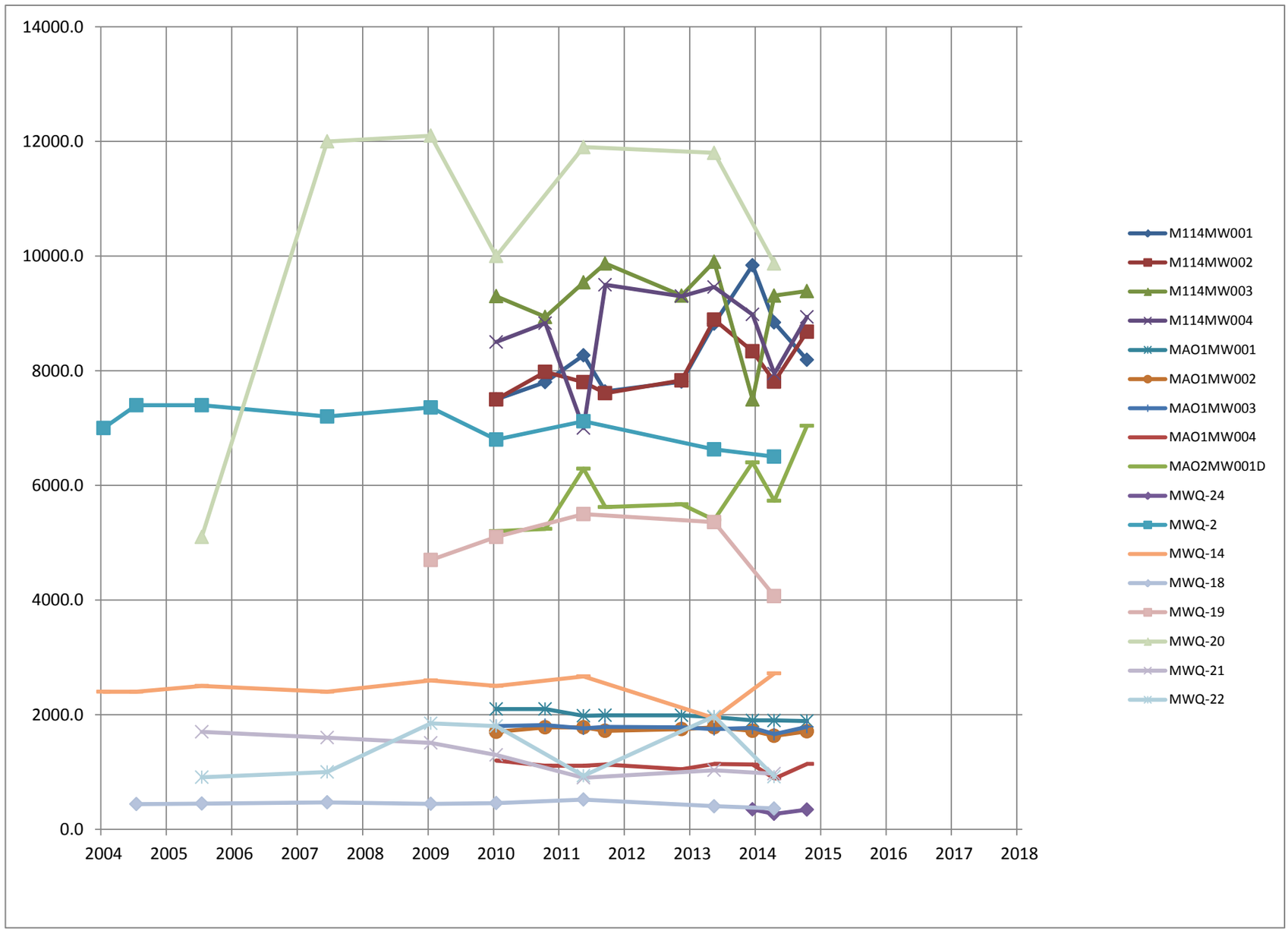
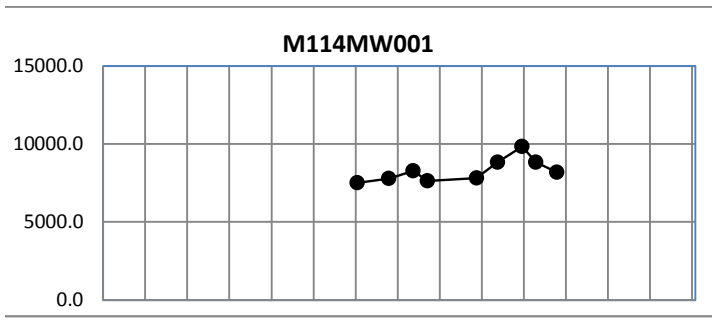
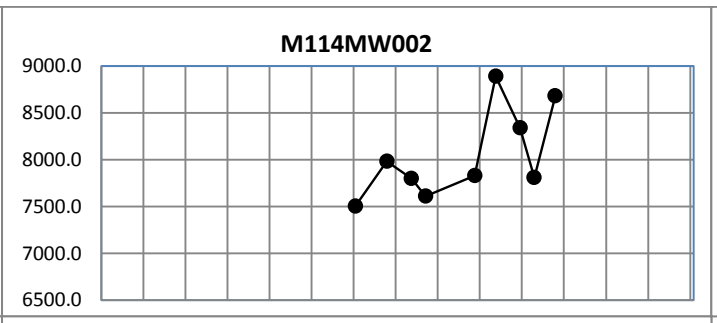
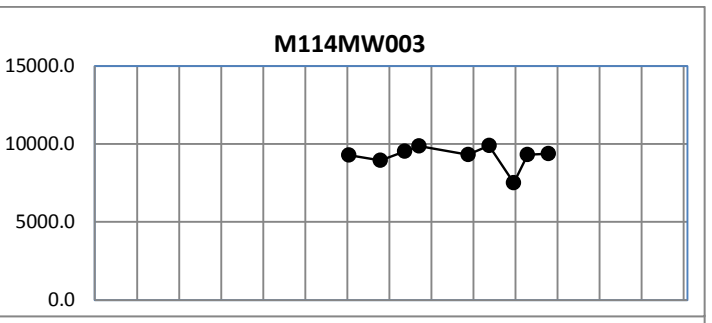


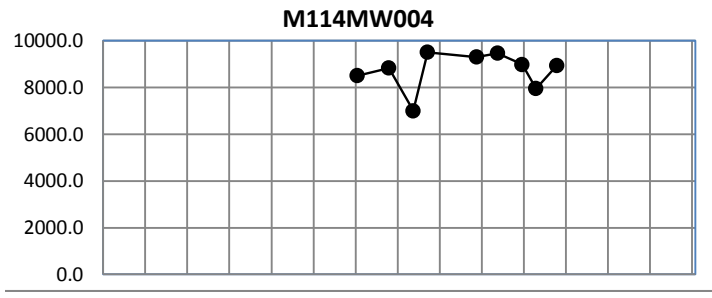
TABLE 6ah
TDS

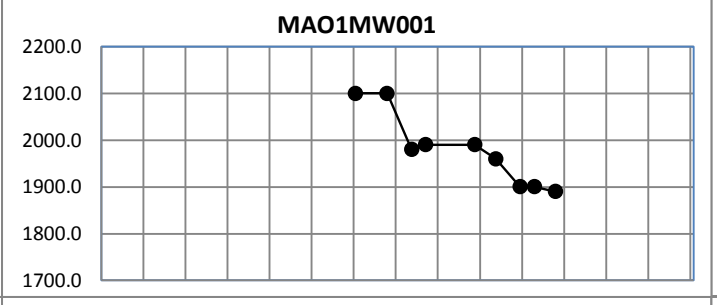
TABLE 6ah
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

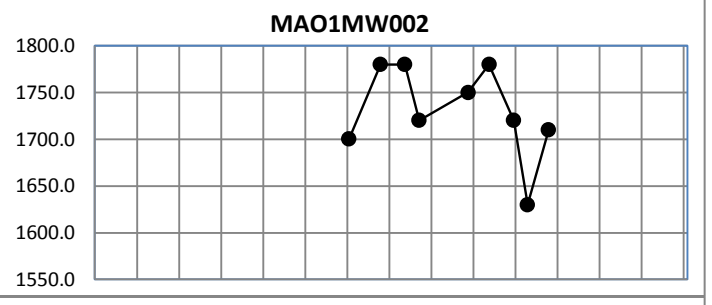


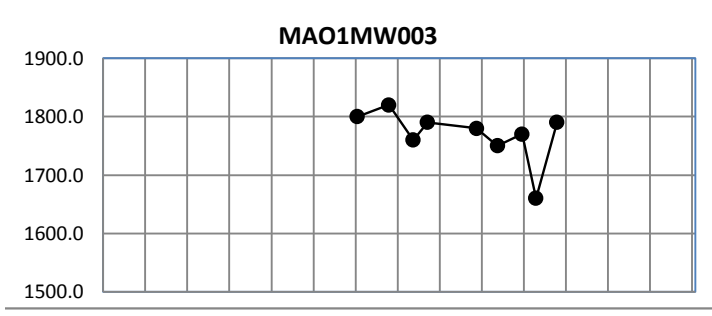


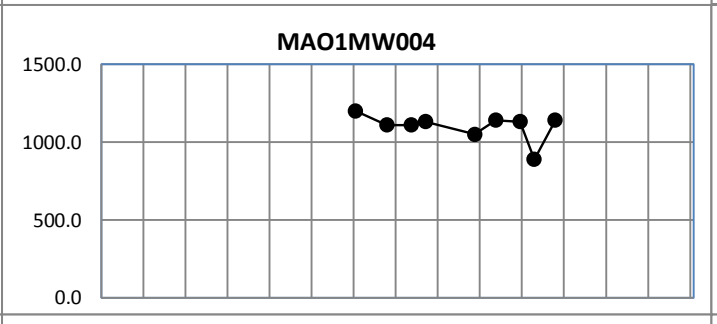


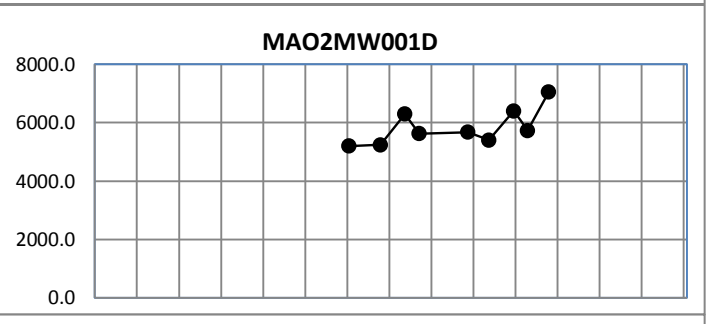


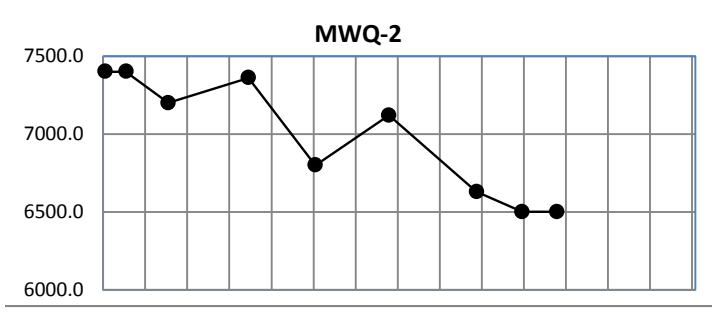


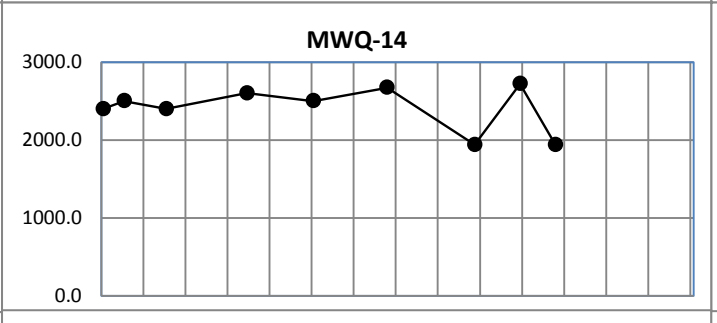


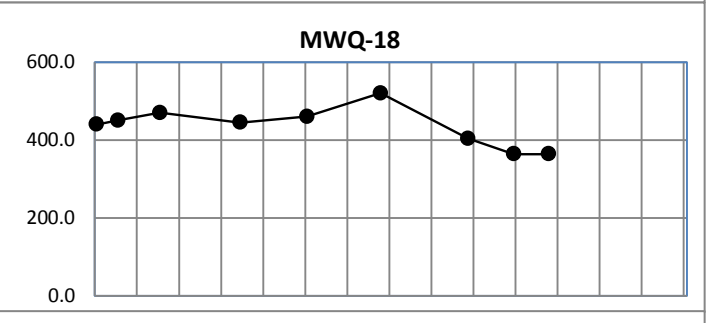


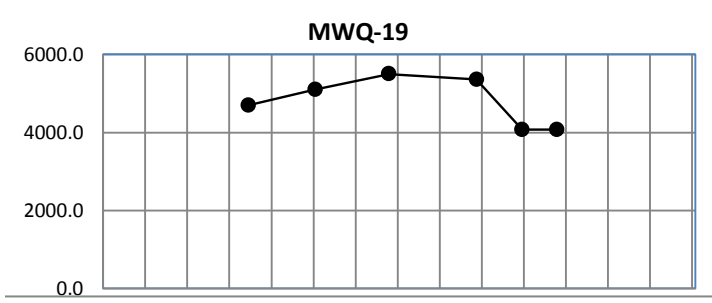


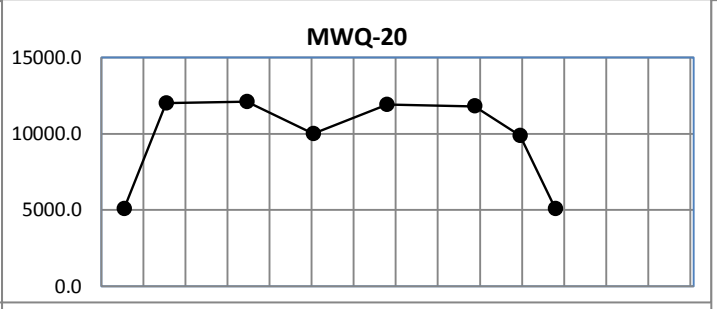


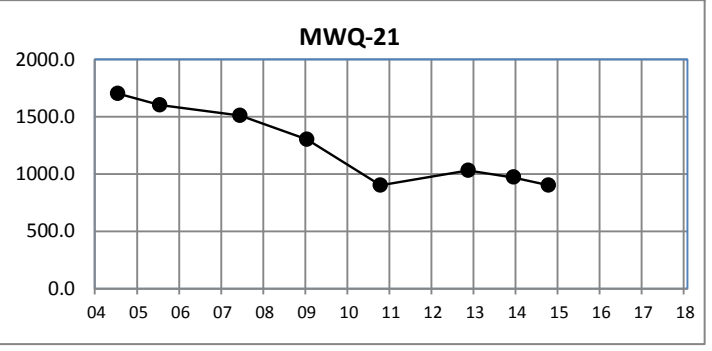


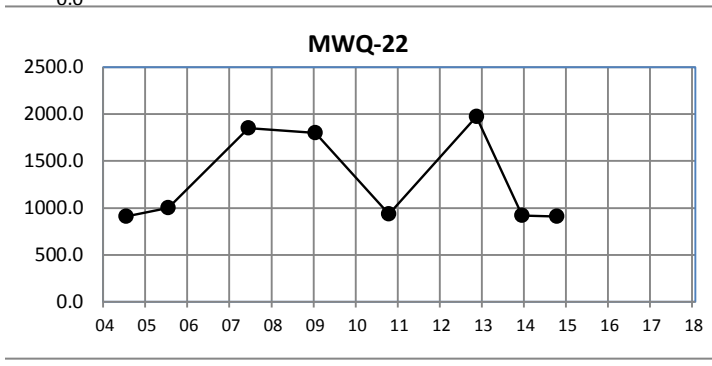


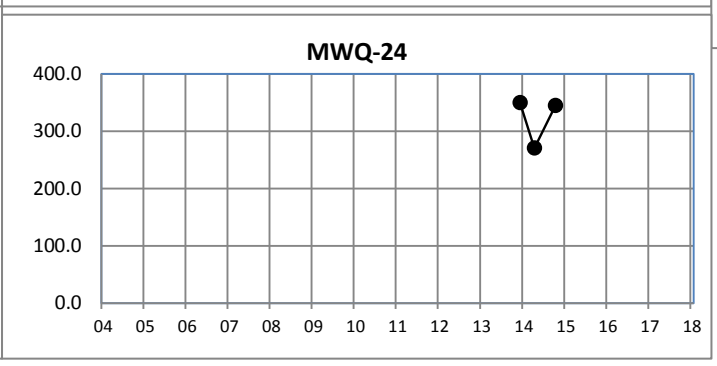












Notes:

Data in mg/L

TABLE 6ai
MELROSE AIR FORCE RANGE
ROOSEVELT AND CURRY COUNTIES, NEW MEXICO

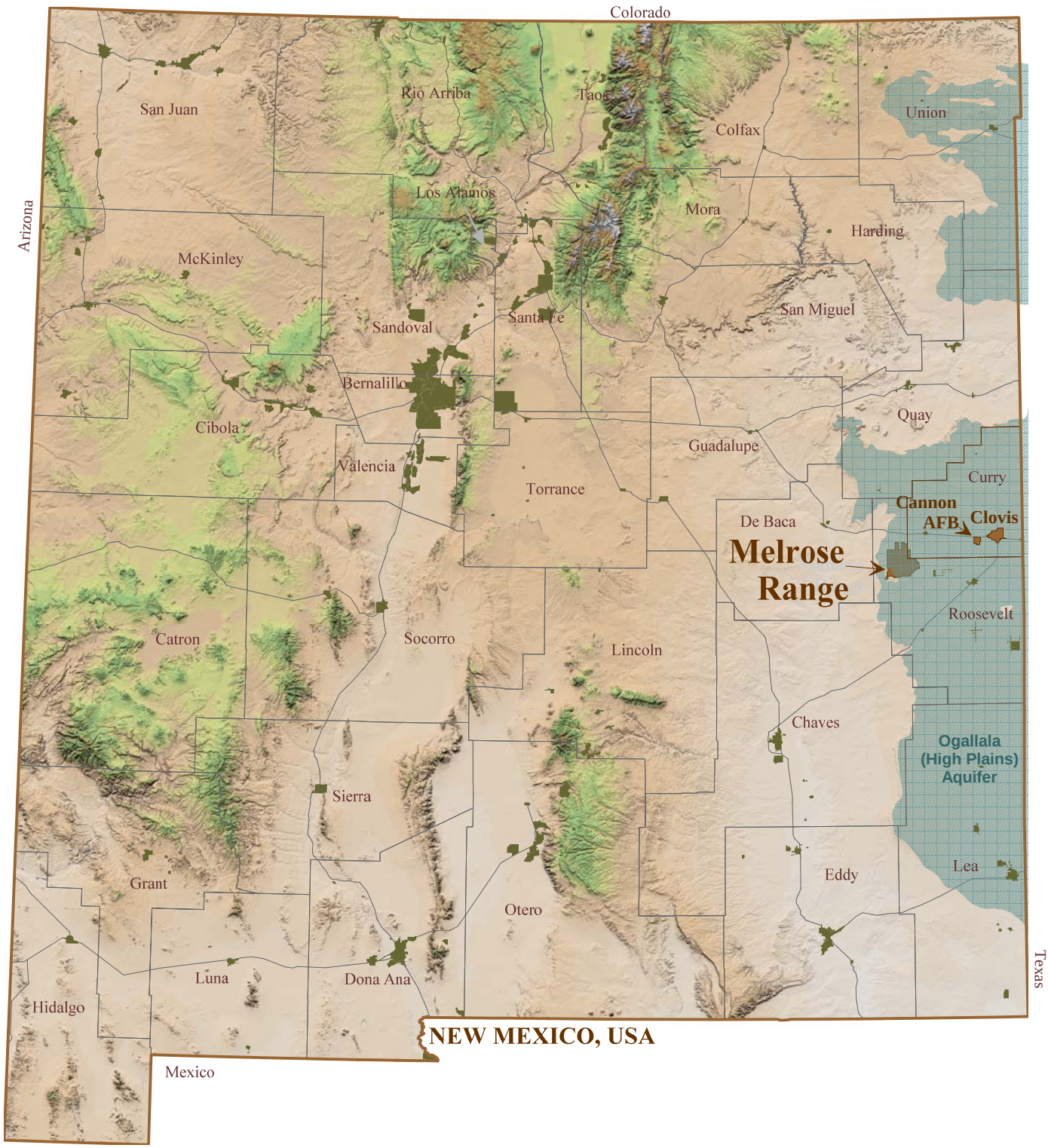
VOCs (µg/L)	NMED SSL Tapwater Screening Level (µg/L)		M114MW001	M114MW002	M114MW003	M114MW004	MAO1MW001	MAO1MW002	MAO1MW003	MAO1MW004	MAO2MW001D	MWQ-23	MWQ-2	MWQ-3	MWQ-4	MWQ-5	MWQ-6	MWQ-7	MWQ-10	MWQ-14	MWQ-18	MWQ-19	MWQ-20	MWQ-21	MWQ-22	MWL-6
Acetone	14063.57	Oct-10			1.15	1.15					1.15																
		May-11							7.24	17.6																	
		Sep-11	1.41	0.909	1.75	5.42																					
		Nov-12		25.6				46.6		290																	
		May-13	2.39																								
		Apr-14					1.38																				
Benzene	4.54	Jun-07																		0.2			0.47				
		Nov-12		0.244						0.883																	
Chloroform	2.29	Jun-07																					0.16				
Chloromethane	20.31	Nov-12		2.21						7.74																	
1,2-Dichloroethane	27.49	Jun-07																					0.13				
Ethylbenzene	14.92	Jul-04																	0.29								
Methylene Chloride	106.46	Jul-04																	0.46								
		Jan-10						0.33	0.5	0.33	0.50																
		Sep-11	0.89		1.37																						
4-Methyl-2-pentanone	1,243	Jun-07																			6.9						
Toluene	1093.25	Jul-04																	1.3								
		Jun-07											0.39							0.55	2.4		0.6		0.33	0.25	
		Jan-10	0.54	0.41	0.49	0.37	0.23		0.46	0.36	0.49																
		May-11	3.06	16.3	4.55	12.4	6.28	1.89			16																
1,2,4-Trimethylbenzene	---	Jul-04																	0.27								
Vinyl Chloride	0.2	Apr-14									**0.606**																
Xylenes	192.99	Jul-04																	1.32								

VOC data shown has been summarized from available reports. Only detected compounds are summarized.

TABLE 6ai
VOCS

FIGURES

This page intentionally left blank



Source files: New Mexico Resource Geographic Information System Program

N
W E
S
0 50
Miles

FIGURE 1
SITE LOCATION MAP
Melrose Air Force Range
Roosevelt and Curry Counties, New Mexico

Trinity Analysis and Development Corp.

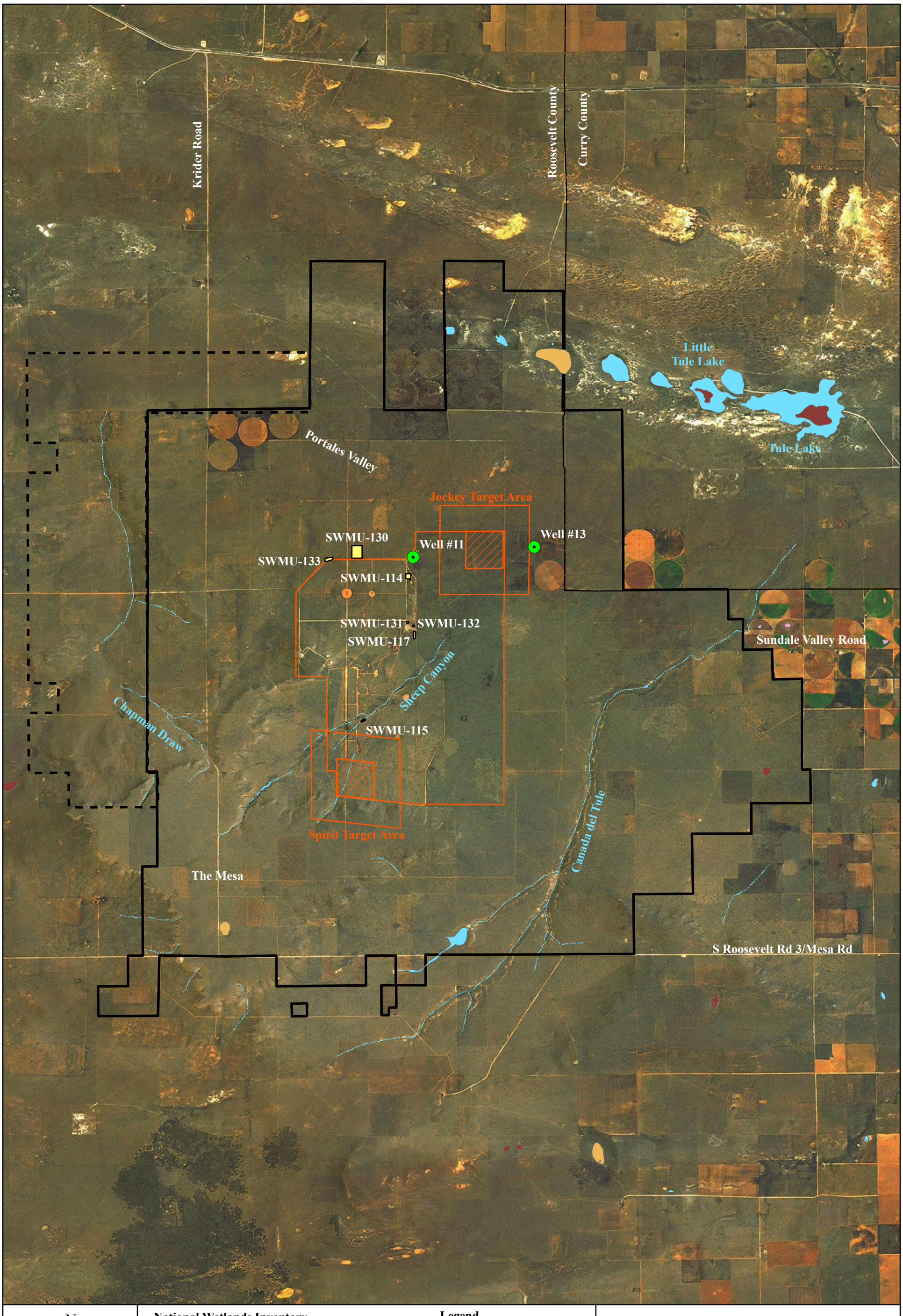
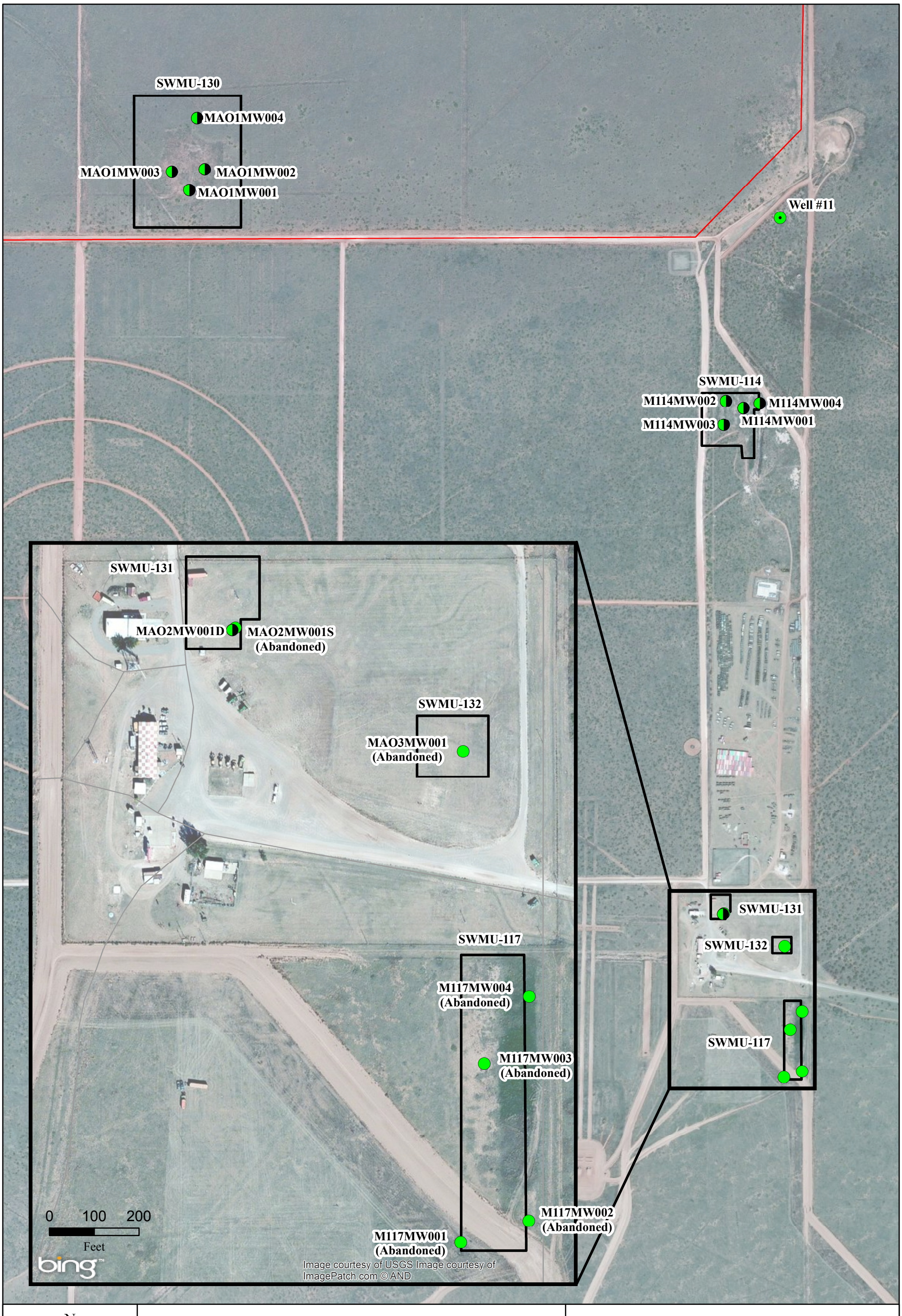


FIGURE 2
AERIAL OVERVIEW
Melrose Air Force Range
Roosevelt and Curry Counties, New Mexico



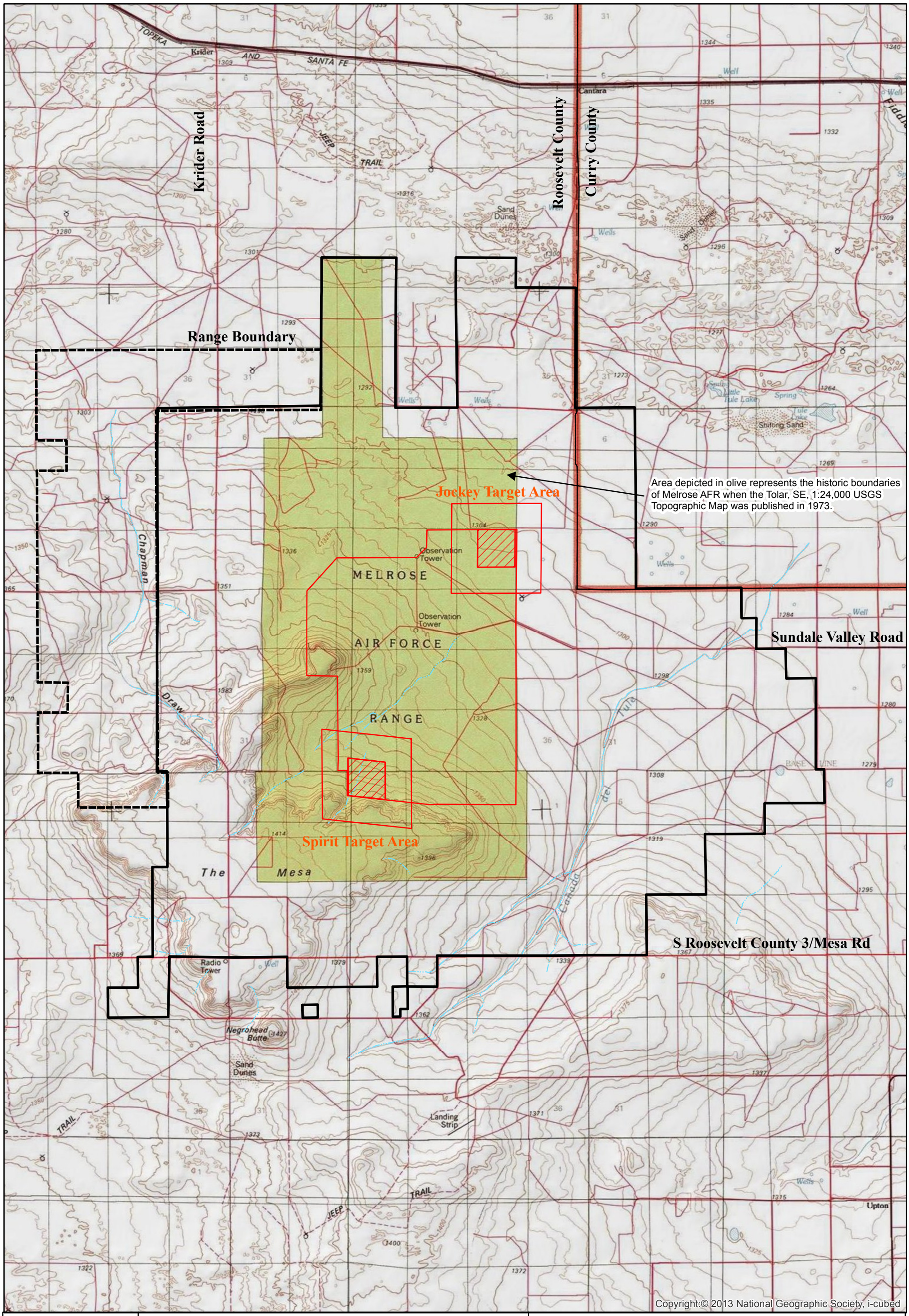
N
W E
S
0 750
Feet

Legend

- Semiannual - Monitoring Well
- Abandoned - Monitoring Well
- Range Complex Supply Wells
- Impact Area

Note: MWQ-24 is included in the semi-annual monitoring network and is shown in Figure 7

FIGURE 3
SEMIANNUAL SWMU MONITORING WELL NETWORK LOCATIONS
Melrose Air Force Range
Roosevelt and Curry Counties, New Mexico



N
W E
S
0 1.5
Miles

Legend

- Target Area
- Impact Area
- Installation Area
- Installation Area, New Mexico Land Trust
- Ephmeral Draw

FIGURE 4
USGS TOPOGRAPHIC MAP OF SITE & VICINITY
Melrose Air Force Range
Roosevelt and Curry Counties, New Mexico

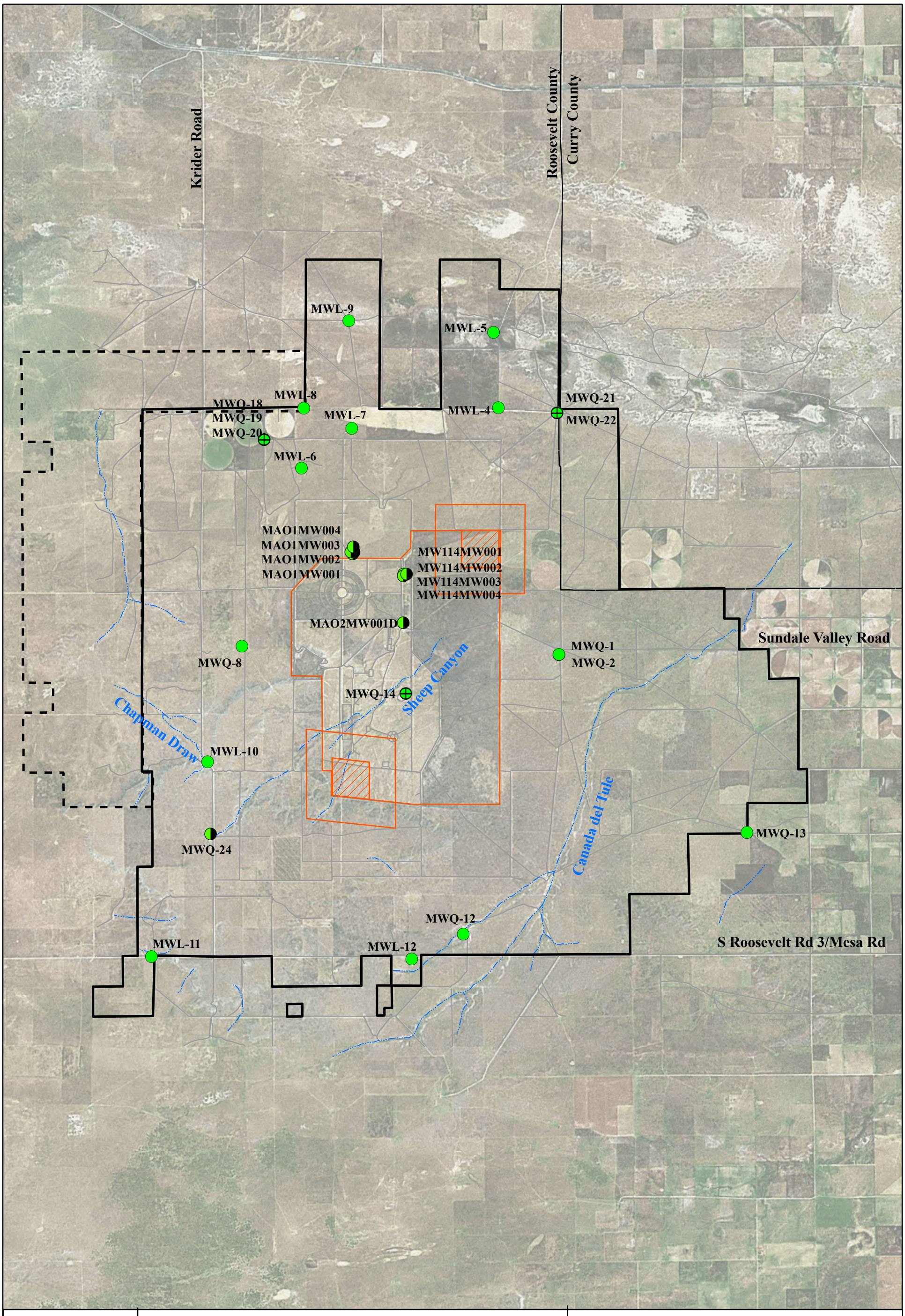
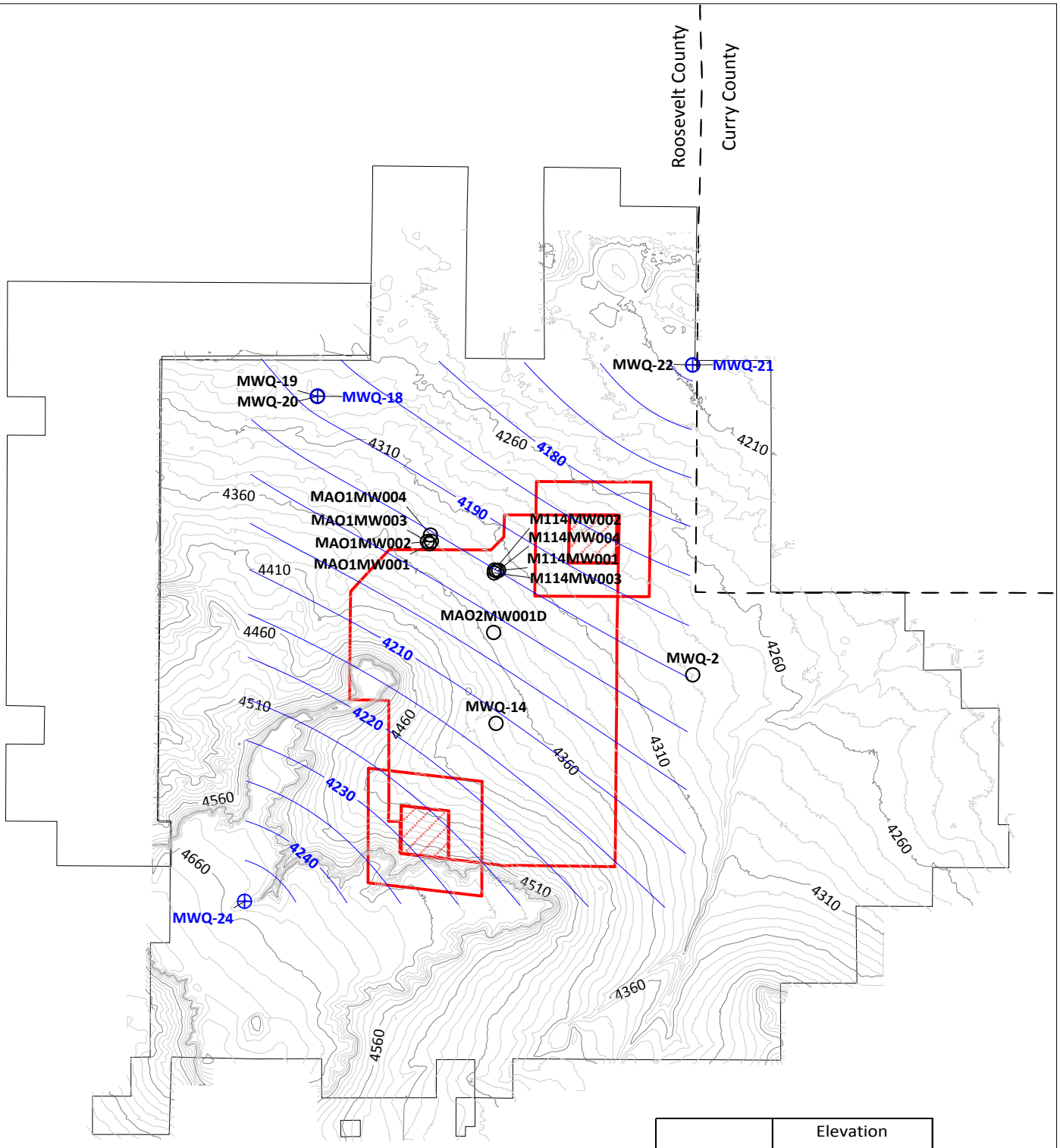


FIGURE 5
ANNUAL MONITORING WELL NETWORK
Melrose Air Force Range
Roosevelt and Curry Counties, New Mexico

Trinity Analysis & Development Corp.



	Elevation (Feet NAVD)
MWQ-24	4598.99
MWQ-18	4188.16
MWQ-21	4163.34

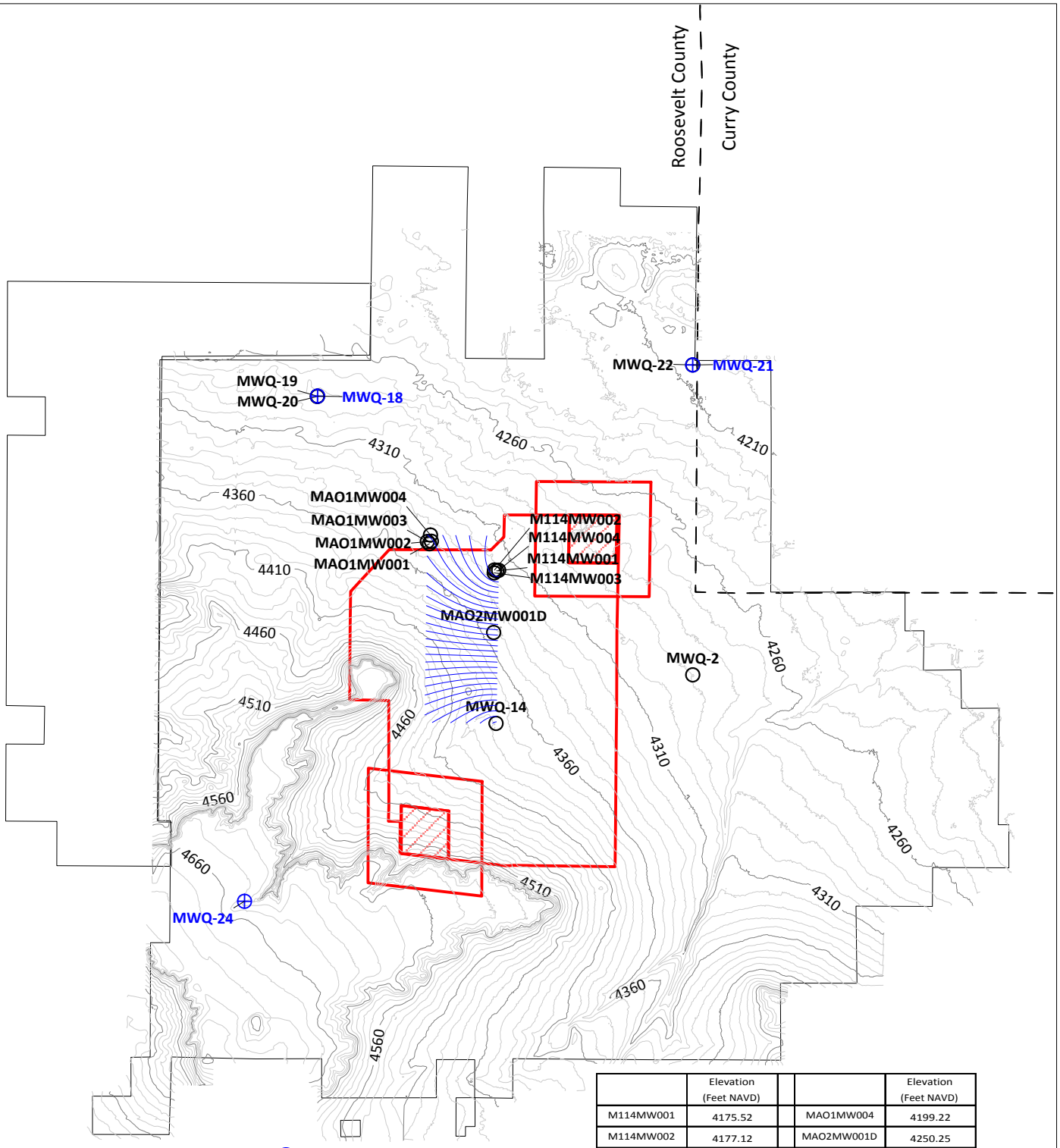
Source: Cannon AFB GIS Database;
Topography data derived from 2005 LIDAR survey;
Vertical Accuracy: < 1 foot
Vertical Datum: NAVD88
Horizontal Accuracy: 0.37 feet
Horizontal Datum: UTM Zone 13N, WGS84
Contour Interval: 10 Feet

⊕ Ogallala Aquifer (Southern High Plains)

○ Chinle Formation

N
W E
S
0 10,000
Feet

FIGURE 6
GROUNDWATER FLOW DIRECTION
OCTOBER 2014
OGALLALA AQUIFER (SOUTHERN HIGH PLAINS AQUIFER)
Melrose Air Force Range
Roosevelt and Curry Counties, New Mexico



	Elevation (Feet NAVD)			Elevation (Feet NAVD)
M114MW001	4175.52		MAO1MW004	4199.22
M114MW002	4177.12		MAO2MW001D	4250.25
M114MW003	4177.68		MWQ-2	4171.99
M114MW004	4175.09		MWQ-14	ND
MAO1MW001	4201.98		MWQ-19	4176.09
MAO1MW002	4200.85		MWQ-20	4206.98
MAO1MW003	4201.65		MWQ-22	4,200.85

MWQ-14 April 23, 2014 water level (4316.47 Feet NAVD) utilized as the well was inaccessible due to live-fire exercise in vicinity of MWQ-14

⊕ Ogallala Aquifer (Southern High Plains)

◯ Chinle Formation

Source: Cannon AFB GIS Database;
Topography data derived from 2005 LIDAR survey;
Vertical Accuracy: < 1 foot
Vertical Datum: NAVD88
Horizontal Accuracy: 0.37 feet
Horizontal Datum: UTM Zone 13N, WGS84
Contour Interval: 10 Feet

MWQ-2, MW-19, MWQ-20, & MAO2MW001D are exluded from the determination of flow in the upper Chinle Formation due to screen location in deeper confined portions of the Chinle Formation. MWQ-22 is excluded as it appears to stradle the Ogallala/Chinle contact.

N
W E
S
0 10,000
Feet

FIGURE 7
GROUNDWATER FLOW DIRECTION
OCTOBER 2014
CHINLE FORMATION
Melrose Air Force Range
Roosevelt and Curry Counties, New Mexico

Trinity Analysis & Development Corp.

APPENDIX A

Field Data

This page intentionally left blank

Groundwater Sampling Logs

This page intentionally left blank

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services
www.trinityadc.com

Modified FDEP Form FD 9000-24

GROUNDWATER SAMPLING LOG

SYSTEM ON SYSTEM OFF X NOT APPLICABLE (NO SYSTEM)

SITE NAME:	SITE LOCATION:	DATE:
Melrose AFR	Melrose AFR, NM	4-30-14

WELL NO:	SAMPLE ID:	FREE PRODUCT: Y (N) DEPTH TO PRODUCT (ft BTOC): NA	FIELD DUPLICATE: Y (N) DUPLICATE ID: NA
MWQ-2	MWQ-2		

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2	1/4	220.64 feet to 230.64 feet	121.65	DBP

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) x WELL CAPACITY
(only fill out if applicable)
= (feet – feet) x gallons/foot = gallons

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY x TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.5 gallons + (0.0026 gallons/foot x 225.5 feet) + 0.25 gallons = 1.32 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
225.71	225.71	1013	1045	4.48

Time	Volume Purged (gallons)	Cum. Volume Purged (gallons)	Purge Rate (gpm)	Depth to Water (ft BTOC)	pH (SU)	Temp. (°C)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	Salinity (‰)	ORP (mV)	Color/ Odor (describe)	Turbidity (NTUs)
1025	1.68	1.68	0.14	126.54	7.72	18.15	10.68	0.43	6.08	56.9	Clear none	1.24
1030	0.70	2.38	0.14	128.34	7.81	18.26	10.67	0.35	6.07	58.6	Clear none	0.98
1035	0.70	3.08	0.14	130.50	7.81	18.34	10.66	0.34	6.08	70.0	Clear none	0.80
1040	0.70	3.78	0.14	132.51	7.81	18.28	10.68	0.32	6.07	79.0	Clear none	2.13
1045	0.70	4.48	0.14	134.40	7.81	18.27	10.68	0.31	6.06	85.1	Clear none	1.01

WELL CAPACITY (gal/ft): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLE TIME:
Benjamin Stewart Trinity		1046

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: (Y) N Filtration Equipment Type: inline	FILTER SIZE: 1 µm
225.71	LDPE		

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced)

FIELD EQUIPMENT IDENTIFICATION

SAMPLE CONTAINER SPECIFICATION				INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED			

H20 QUALITY PARAMETER
Model: YSI 556 SN#: 08E100695
TURBIDIMETER
Model: 1419870S SN#: 08357016
OTHER

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater)
Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

well needs repair_____ needs well tag _____ locking cap: _____ other comment: _____

DI Water Lot # _____ MS / MSD ✓ Equip blk _____ Ambient blk _____ Trip blk _____

MWQ-2-MS
MWQ-2-SD

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services
www.trinityadc.com

Modified FDEP Form FD 9000-24

GROUNDWATER SAMPLING LOG

SYSTEM ON SYSTEM OFF X NOT APPLICABLE (NO SYSTEM)

SITE NAME: Melrose AFR	SITE LOCATION: Melrose, NM	DATE: 5-1-14
WELL NO: MWQ-14	SAMPLE ID: MWQ-14	FREE PRODUCT: Y (N) NA DEPTH TO PRODUCT (ft BTOC):	FIELD DUPLICATE: Y (N) DUPLICATE ID: NA

PURGING DATA

WELL DIAMETER (inches): 4	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 90.7 feet to 110.7 feet	STATIC DEPTH TO WATER (feet): 65.64	PURGE PUMP TYPE OR BAILER: DBP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) x WELL CAPACITY
(only fill out if applicable)
= (feet – feet) x gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY x TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.5 gallons + (0.0026 gallons/foot x 97 feet) + 0.25 gallons = 1.00 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 100.66	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 100.66	PURGING INITIATED AT: 0720	PURGING ENDED AT: 0750	TOTAL VOLUME PURGED (gallons): 4.2

Time	Volume Purged (gallons)	Cum. Volume Purged (gallons)	Purge Rate (gpm)	Depth to Water (ft BTOC)	pH (SU)	Temp. (°C)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	Salinity (‰)	ORP (mV)	Color/ Odor (describe)	Turbidity (NTUs)
0735	2.1	2.1	0.14	67.08	8.05	16.99	3.657	2.50	1.93	203.3	Clear none	2.35
0740	0.7	2.8	0.14	67.44	8.19	17.01	3.636	2.35	1.92	196.1	" "	2.14
0745	0.7	3.5	0.14	67.54	8.19	17.37	3.625	2.32	1.92	193.1	" "	1.87
0750	0.7	4.2	0.14	67.61	8.18	17.33	3.622	2.27	1.92	190.7	" "	0.98

WELL CAPACITY (gal/ft): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Ben Stewart Trinity	SAMPLER(S) SIGNATURE(S):	SAMPLE TIME: 0751
PUMP OR TUBING DEPTH IN WELL (feet): 100.66	TUBING MATERIAL CODE: LDPE	FIELD-FILTERED: (Y) N FILTER SIZE: 1 µm Filtration Equipment Type: inline

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced)

SAMPLE CONTAINER SPECIFICATION				INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED			

FIELD EQUIPMENT IDENTIFICATION

H20 QUALITY PARAMETER
Model: YSI 556 SN#: 08E100695

TURBIDIMETER
Model: HI98703 SN#: 08357016

OTHER

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater)
Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

well needs repair_____ needs well tag _____ locking cap: _____ other comment: _____

DI Water Lot # _____ MS / MSD _____ Equip blk _____ Ambient blk _____ Trip blk _____

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services
www.trinityadc.com

Modified FDEP Form FD 9000-24

GROUNDWATER SAMPLING LOG

SYSTEM ON SYSTEM OFF X NOT APPLICABLE (NO SYSTEM)

SITE NAME: Melrose AFR	SITE LOCATION: Melrose, NM	DATE: 4-29-14
WELL NO: MW2-18	SAMPLE ID: MW2-18	FREE PRODUCT: Y (N) DEPTH TO PRODUCT (ft BTOC): NA	FIELD DUPLICATE: Y (N) DUPLICATE ID: NA

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 119 feet to 139 feet	STATIC DEPTH TO WATER (feet): 102.30	PURGE PUMP TYPE OR BAILER: QB P

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) x WELL CAPACITY
(only fill out if applicable)
= (~~feet~~ – ~~feet~~) x ~~gallons/foot~~ = ~~gallons~~

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY x TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.5 gallons + (0.0026 gallons/foot x 126.5 feet) + 0.25 gallons = 1.07 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 128.15	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 128.15	PURGING INITIATED AT: 0900	PURGING ENDED AT: 0930	TOTAL VOLUME PURGED (gallons): 4.2

Time	Volume Purged (gallons)	Cum. Volume Purged (gallons)	Purge Rate (gpm)	Depth to Water (ft BTOC)	pH (SU)	Temp. (°C)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	Salinity (‰)	ORP (mV)	Color/ Odor (describe)	Turbidity (NTUs)
0910	1.4	1.4	0.14	102.40	8.00	17.82	0.594	5.92	0.29	-16.8	clear none	5.08
0915	0.7	2.1	0.14	102.56	8.00	17.82	0.594	6.01	0.29	-6.80	" "	4.36
0920	0.7	2.8	0.14	102.56	8.00	17.91	0.594	6.26	0.29	7.81	" "	4.38
0925	0.7	3.5	0.14	102.59	7.99	17.79	0.594	6.21	0.29	7.75	" "	3.79
0930	0.7	4.2	0.14	102.72	7.99	17.90	0.594	6.20	0.29	9.11	" "	3.11

WELL CAPACITY (gal/ft): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Ben Stewart Trinity	SAMPLER(S) SIGNATURE(S):	SAMPLE TIME: 0931
PUMP OR TUBING DEPTH IN WELL (feet): 128.15	TUBING MATERIAL CODE: LDPE	FIELD-FILTERED: (Y) N FILTER SIZE: 1 µm Filtration Equipment Type: inline

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced)

FIELD EQUIPMENT IDENTIFICATION

SAMPLE CONTAINER SPECIFICATION				INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED			

H20 QUALITY PARAMETER
Model: YSI556 SN#: 08E100695
TURBIDIMETER
Model: 9 8703 SN#: 0835 7016
OTHER

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater)
Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

well needs repair_____ needs well tag _____ locking cap: _____ other comment: _____

DI Water Lot # _____ MS / MSD _____ Equip blk _____ Ambient blk _____ Trip blk _____

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services
www.trinityadc.com

Modified FDEP Form FD 9000-24

GROUNDWATER SAMPLING LOG

SYSTEM ON SYSTEM OFF X NOT APPLICABLE (NO SYSTEM)

SITE NAME: Melrose AFR	SITE LOCATION: Melrose NM		DATE: 4-29-14
WELL NO: MWQ-19	SAMPLE ID: MWQ-19	FREE PRODUCT: Y (N) DEPTH TO PRODUCT (ft BTOC): NA	FIELD DUPLICATE: Y (N) DUPLICATE ID: NA

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 200.7 feet to 221.7 feet	STATIC DEPTH TO WATER (feet): 101.69	PURGE PUMP TYPE OR BAILER: QBP

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) x WELL CAPACITY
(only fill out if applicable)
= (feet – feet) x gallons/foot = gallons

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY x TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.5 gallons + (0.0026 gallons/foot x 208.5 feet) + 0.25 gallons = 1.29 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 210.19	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 210.19	PURGING INITIATED AT: 0800	PURGING ENDED AT 0840	TOTAL VOLUME PURGED (gallons): 5.6

Time	Volume Purged (gallons)	Cum. Volume Purged (gallons)	Purge Rate (gpm)	Depth to Water (ft BTOC)	pH (SU)	Temp. (°C)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	Salinity (‰)	ORP (mV)	Color/ Odor (describe)	Turbidity (NTUs)
0820	2.8	2.8	0.14	113.02	7.67	17.68	7.200	0.39	3.97	-97.1	Clear none	3.65
0825	0.7	3.5	"	114.11	7.64	17.77	6.986	0.38	3.85	-106.4	" "	2.11
0830	0.7	4.2	"	115.21	7.62	17.82	6.801	0.45	3.76	-111.0	" "	2.08
0835	0.7	4.9	"	116.86	7.61	17.79	6.910	0.47	3.76	-115.0	" "	1.98
0840	0.7	5.6	"	117.40	7.61	17.77	6.875	0.48	3.71	-115.1	" "	2.14

WELL CAPACITY (gal/ft): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Ben Stewart Trinity	SAMPLER(S) SIGNATURE(S):	SAMPLE TIME: 0841
PUMP OR TUBING DEPTH IN WELL (feet): 210.19	TUBING MATERIAL CODE: LDPE	FIELD-FILTERED: (Y) N Filtration Equipment Type: inline FILTER SIZE: 1 µm

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced)

SAMPLE CONTAINER SPECIFICATION				INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED			

FIELD EQUIPMENT IDENTIFICATION

H20 QUALITY PARAMETER
Model: YSI556 SN#: 08E100695

TURBIDIMETER
Model: HI98703 SN#: 08357c16

OTHER

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater)
Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

well needs repair_____ needs well tag _____ locking cap: _____ other comment: _____

DI Water Lot # _____ MS / MSD _____ Equip blk _____ Ambient blk _____ Trip blk _____

TRINITY ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services
www.trinityadc.com

Modified FDEP Form FD 9000-24

GROUNDWATER SAMPLING LOG

SYSTEM ON SYSTEM OFF NOT APPLICABLE (NO SYSTEM)

SITE NAME: Melrose AFR	SITE LOCATION: Melrose, NM	DATE: 5-1-14
WELL NO: MWQ-20	SAMPLE ID: MWQ-20	FREE PRODUCT: Y (N) NA DEPTH TO PRODUCT (ft BTOC):	FIELD DUPLICATE: Y (N) DUPLICATE ID: NA

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 256 feet to 296 feet	STATIC DEPTH TO WATER (feet): 84.46	PURGE PUMP TYPE OR BAILER: DBA

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) x WELL CAPACITY
(only fill out if applicable)
= (feet – feet) x gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY x TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.5 gallons + (0.0026 gallons/foot x 272 feet) + 0.25 gallons = 1.45 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 275.75	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 275.75	PURGING INITIATED AT: 0935	PURGING ENDED AT: 1015	TOTAL VOLUME PURGED (gallons): 3.78

Time	Volume Purged (gallons)	Cum. Volume Purged (gallons)	Purge Rate (gpm)	Depth to Water (ft BTOC)	pH (SU)	Temp. (°C)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	Salinity (‰)	ORP (mV)	Color/ Odor (describe)	Turbidity (NTUs)
948	1.82	1.82	0.14	85.22	7.76	17.83	16.98	0.57	10.01	153.2	Clear none	6.85
0955	0.98	0.98	"	89.33	7.76	17.97	16.76	0.67	9.90	154.9	" "	11.60
1000	0.7	1.68	"	91.60	7.73	19.91	16.71	0.28	9.85	146.9	" "	12.70
1005	0.7	2.38	"	93.94	7.71	17.98	16.65	0.22	9.81	131.0	" "	11.90
1010	0.7	3.08	"	96.17	7.70	17.92	16.64	0.23	9.80	123.2	" "	11.70
1015	0.7	3.78	"	98.31	7.69	17.99	16.61	0.21	9.80	121.7	" "	10.40

WELL CAPACITY (gal/ft): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Ben Stewart Trinity	SAMPLER(S) SIGNATURE(S):	SAMPLE TIME: 1016
PUMP OR TUBING DEPTH IN WELL (feet): 275.75	TUBING MATERIAL CODE: PE	FIELD-FILTERED: (Y) N FILTER SIZE: 1 µm Filtration Equipment Type: In Line

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced)

FIELD EQUIPMENT IDENTIFICATION

SAMPLE CONTAINER SPECIFICATION				INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED			

H20 QUALITY PARAMETER
Model: YSI 556 SN#: 08E100645
TURBIDIMETER
Model: HI98703 SN#: 08357016
OTHER

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater)
Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

well needs repair _____ needs well tag _____ locking cap: _____ other comment: Split Sample

DI Water Lot # _____ MS / MSD _____ Equip blk _____ Ambient blk _____ Trip blk _____

TRINITY ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services
www.trinityadc.com

Modified FDEP Form FD 9000-24

GROUNDWATER SAMPLING LOG

SYSTEM ON SYSTEM OFF (NOT APPLICABLE (NO SYSTEM))

SITE NAME: Melrose AFR	SITE LOCATION: Melrose, NM		DATE: 4-29-14
WELL NO: MWQ-21	SAMPLE ID: MWQ-21	FREE PRODUCT: Y N DEPTH TO PRODUCT (ft BTOC):	FIELD DUPLICATE: Y (N) DUPLICATE ID: NA

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 40.70 feet to 60.70 feet	STATIC DEPTH TO WATER (feet): 45.81	PURGE PUMP TYPE OR BAILER: QBP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) x WELL CAPACITY
(only fill out if applicable)
= (feet – feet) x gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY x TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.5 gallons + (0.0026 gallons/foot x 52.5 feet) + 0.25 gallons = 0.88 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 54.14	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 54.14	PURGING INITIATED AT: 1133	PURGING ENDED AT: 1240	TOTAL VOLUME PURGED (gallons): 9.38

Time	Volume Purged (gallons)	Cum. Volume Purged (gallons)	Purge Rate (gpm)	Depth to Water (ft BTOC)	pH (SU)	Temp. (°C)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	Salinity (‰)	ORP (mV)	Color/ Odor (describe)	Turbidity (NTUs)
1145	1.68	1.68	0.14	45.83	7.63	17.34	1.329	5.28	0.67	102.1	Cloudy none	296
1200	2.10	3.78	"	45.83	7.53	17.47	1.375	4.86	0.69	108.9	" "	280
1205	0.70	4.48	"	45.84	7.53	17.50	1.378	4.98	0.69	110.1	" "	180
1210	0.70	5.18	"	45.84	7.52	17.47	1.377	4.88	0.69	112.3	" "	149
1215	0.70	5.88	"	45.84	7.53	17.52	1.381	4.92	0.69	113.9	" "	125
1220	0.70	6.58	"	45.84	7.55	17.37	1.385	4.91	0.69	104.8	" "	95.6
1230	1.40	7.98	"	45.84	7.55	17.57	1.387	4.91	0.69	120.6	" "	54.0
1235	0.70	8.68	"	45.84	7.52	17.51	1.385	4.91	0.70	115.6	" "	45.0
1240	0.70	9.38	"	45.84	7.57	17.54	1.386	4.91	0.70	116.7	" "	38.1

WELL CAPACITY (gal/ft): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Ben Stewart Trinity	SAMPLER(S) SIGNATURE(S):	SAMPLE TIME: 1241
PUMP OR TUBING DEPTH IN WELL (feet): 54.14	TUBING MATERIAL CODE: HDPE	FIELD-FILTERED: Y (N) FILTER SIZE: 1 µm Filtration Equipment Type: Silicone

FIELD DECONTAMINATION: PUMP Y (N) TUBING (Y) N (replaced)

SAMPLE CONTAINER SPECIFICATION				INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED			

FIELD EQUIPMENT IDENTIFICATION
H20 QUALITY PARAMETER — Model: 451552 SN#: 08E100695
TURBIDIMETER — Model: H196703 SN#: 08357016
OTHER

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater)
Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

well needs repair_____ needs well tag _____ locking cap: _____ other comment: _____

DI Water Lot # _____ MS / MSD _____ Equip blk _____ Ambient blk _____ Trip blk _____

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services
www.trinityadc.com

Modified FDEP Form FD 9000-24

GROUNDWATER SAMPLING LOG

SYSTEM ON SYSTEM OFF X NOT APPLICABLE (NO SYSTEM)

SITE NAME: Melrose AFR	SITE LOCATION: Melrose, NM	DATE: 4-30-14
WELL NO: MWQ-22	SAMPLE ID: MWQ-22	FREE PRODUCT: Y (N) NA DEPTH TO PRODUCT (ft BTOC):	FIELD DUPLICATE: (Y) N DUPLICATE ID: MWQ-22-a

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2	1/4	90.70 feet to 150.70 feet	42.60	OBP

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) x WELL CAPACITY
(only fill out if applicable)
= (feet – feet) x gallons/foot = gallons

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY x TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.5 gallons + (0.0026 gallons/foot x 118.5 feet) + 0.25 gallons = 1.06 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
120.3	120.3	0750	0840	7.0

Time	Volume Purged (gallons)	Cum. Volume Purged (gallons)	Purge Rate (gpm)	Depth to Water (ft BTOC)	pH (SU)	Temp. (°C)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	Salinity (‰)	ORP (mV)	Color/ Odor (describe)	Turbidity (NTUs)
0815	3.5	3.5	0.14	45.40	8.13	16.81	2.876	0.38	1.5	-130.1	clear none	16.7
0820	0.7	4.2	"	45.79	8.12	16.85	2.576	0.34	1.34	-157.5	" "	11.3
0825	0.7	4.9	"	45.91	8.07	16.90	2.006	0.30	1.02	-153.7	" "	6.16
0830	0.7	5.6	"	45.95	8.04	16.81	1.911	0.34	0.97	-148.8	" "	6.01
0835	0.7	6.3	"	46.05	8.04	16.86	1.911	0.34	0.96	-146.5	" "	5.98
0840	0.7	7.0	"	46.09	8.03	16.84	1.910	0.34	0.95	-145.4	" "	4.14

WELL CAPACITY (gal/ft): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLE TIME:
Ben Stewart Trinity		0841
PUMP OR TUBING DEPTH IN WELL (feet): 120.3	TUBING MATERIAL CODE: LDPE	FIELD FILTERED: (Y) N Filtration Equipment Type: Active	FILTER SIZE: 1 µm

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (Replaced)

FIELD EQUIPMENT IDENTIFICATION

SAMPLE CONTAINER SPECIFICATION				INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED			

H20 QUALITY PARAMETER
Model: 451552 SN#: 08E100695
TURBIDIMETER
Model: H198703 SN#: 08357016
OTHER

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater)
Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

well needs repair_____ needs well tag _____ locking cap: _____ other comment: _____

DI Water Lot # _____ MS / MSD _____ Equip blk _____ Ambient blk _____ Trip blk _____

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services
www.trinityadc.com

Modified FDEP Form FD 9000-24

GROUNDWATER SAMPLING LOG

SYSTEM ON SYSTEM OFF X NOT APPLICABLE (NO SYSTEM)

SITE NAME: Sump 131	SITE LOCATION: Melrose AFR, NM		DATE: 4-25-14
WELL NO: MA02MW001D	SAMPLE ID: MA02MW001D	FREE PRODUCT: Y N DEPTH TO PRODUCT (ft BTOC): NA	FIELD DUPLICATE: (Y) N DUPLICATE ID: MA02MW001D-a

PURGING DATA

WELL DIAMETER (inches): 4	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 161.95 feet to 181.95 feet	STATIC DEPTH TO WATER (feet): 105.56	PURGE PUMP TYPE OR BAILER: QBP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) x WELL CAPACITY
(only fill out if applicable)
= (182.78 feet – 105.56 feet) x 0.65 gallons/foot = 49.86 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY x TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.5 gallons + (0.0026 gallons/foot x 176 feet) + 0.25 gallons = 1.21 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 179.3	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 179.3	PURGING INITIATED AT: 1213	PURGING ENDED AT: 1251	TOTAL VOLUME PURGED (gallons): 3.69

Time	Volume Purged (gallons)	Cum. Volume Purged (gallons)	Purge Rate (gpm)	Depth to Water (ft BTOC)	pH (SU)	Temp. (°C)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	Salinity (‰)	ORP (mV)	Color/ Odor (describe)	Turbidity (NTUs)
1230	1.53	1.53	0.09	108.18	7.92	18.77	9.66	0.15	5.45	121.0	clear none	0.48
1233	0.27	1.80	0.09	108.71	7.91	18.83	9.58	0.15	5.41	114.8	clear none	0.45
1236	0.27	2.07	0.09	109.05	7.91	18.76	9.51	0.16	5.36	111.8	clear none	0.51
1239	0.27	2.34	0.09	109.47	7.91	18.87	9.48	0.16	5.35	109.4	clear none	0.42
1242	0.27	2.61	0.09	109.65	7.90	18.83	9.50	0.17	5.36	108.3	clear none	0.31
1245	0.27	2.88	0.09	110.11	7.91	18.81	9.48	0.20	5.34	105.3	clear none	0.29
1248	0.27	3.42	0.09	110.34	7.91	18.79	9.48	0.21	5.34	105.0	clear none	0.17
1251	0.27	3.69	0.09	110.69	7.90	18.87	9.48	0.21	5.35	102.6	clear none	0.10

WELL CAPACITY (gal/ft): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Benjamin Stewart Trinity ADC	SAMPLER(S) SIGNATURE(S):	SAMPLE TIME: 1252
PUMP OR TUBING DEPTH IN WELL (feet): 179.3	TUBING MATERIAL CODE: LDPE	FIELD-FILTERED: (Y) N FILTER SIZE: 1 µm Filtration Equipment Type: inline

FIELD DECONTAMINATION: PUMP Y (N) TUBING (Y) N (replaced)

FIELD EQUIPMENT IDENTIFICATION

SAMPLE CONTAINER SPECIFICATION				INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED			
						0.09gpm

H20 QUALITY PARAMETER
Model: 451556 SN#: 08E100695
TURBIDIMETER
Model: H198703 SN#: 08357016
OTHER

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater)
Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

well needs repair_____ needs well tag _____ locking cap: _____ other comment: _____
DI Water Lot # _____ MS / MSD _____ Equip blk _____ Ambient blk _____ Trip blk TB-7

TRINITY ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services
www.trinityadc.com

Modified FDEP Form FD 9000-24

GROUNDWATER SAMPLING LOG

SYSTEM ON SYSTEM OFF X NOT APPLICABLE (NO SYSTEM)

SITE NAME:	SITE LOCATION:	DATE:
SWMU 130	Melrose AFR	4-23-14

WELL NO:	SAMPLE ID:	FREE PRODUCT: Y N	FIELD DUPLICATE: Y N
MA01MW001	MA01MW001	DEPTH TO PRODUCT (ft BTOC): NA	DUPLICATE ID: NA

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
4	1/4	141.5 feet to 161.5 feet	142.23	DBP

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) x WELL CAPACITY
(only fill out if applicable)
= (feet – feet) x gallons/foot = gallons

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY x TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.5 gallons + (0.0026 gallons/foot x 155 feet) + 0.25 gallons = 1.15 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
158.9	158.9	1345	1415	4.20

Time	Volume Purged (gallons)	Cum. Volume Purged (gallons)	Purge Rate (gpm)	Depth to Water (ft BTOC)	pH (SU)	Temp. (°C)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	Salinity (‰)	ORP (mV)	Color/ Odor (describe)	Turbidity (NTUs)
1350	0.7	0.7	0.14	143.45	7.87	18.94	3.209	5.54	1.69	64.8	Clear none	0.28
1355	0.7	1.4	0.14	143.59	7.84	18.96	3.219	5.44	1.69	70.0	" "	0.28
1400	0.7	2.1	0.14	143.72	7.85	18.94	3.220	5.46	"	75.3	" "	0.21
1405	0.7	2.8	0.14	143.93	7.84	18.93	3.223	5.47	"	77.0	" "	0.22
1410	0.7	3.5	0.14	143.95	7.85	18.93	3.220	5.48	"	78.2	" "	0.42
1415	0.7	4.2	0.14	143.92	7.86	18.96	3.217	5.47	"	80.2	" "	0.33

WELL CAPACITY (gal/ft): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLE TIME:
Benjamin Stant Trinity		1416

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y N	FILTER SIZE: 1 µm
158.9	LDPE	Filtration Equipment Type: inline	

FIELD DECONTAMINATION: PUMP Y N TUBING Y N (replaced)

FIELD EQUIPMENT IDENTIFICATION

SAMPLE CONTAINER SPECIFICATION				INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED			

H20 QUALITY PARAMETER
Model: YSI556 SN#: 08E100695
TURBIDIMETER
Model: HI98703 SN#: U8357016
OTHER

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater)
Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

well needs repair_____ needs well tag _____ locking cap: _____ other comment: _____

DI Water Lot # _____ MS / MSD _____ Equip blk _____ Ambient blk _____ Trip blk TB-2

TRINITY ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services
www.trinityadc.com

Modified FDEP Form FD 9000-24

GROUNDWATER SAMPLING LOG

SYSTEM ON SYSTEM OFF X NOT APPLICABLE (NO SYSTEM)

SITE NAME: SWMU-130	SITE LOCATION: Melrose AFR, NM	DATE: 4-23-14
WELL NO: MAO1MW002	SAMPLE ID: MAO1MW002	FREE PRODUCT: Y N (N) DEPTH TO PRODUCT (ft BTOC):	FIELD DUPLICATE: Y N (N) DUPLICATE ID: NA

PURGING DATA

WELL DIAMETER (inches): 4	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 145.31 feet to 155.31 feet	STATIC DEPTH TO WATER (feet): 142.38	PURGE PUMP TYPE OR BAILER: QBP

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) x WELL CAPACITY
(only fill out if applicable)
= (feet – feet) x gallons/foot = gallons

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY x TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.50 gallons + (0.0026 gallons/foot x 152 feet) + 0.25 gallons = 1.14 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 152.6	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 152.6	PURGING INITIATED AT: 0930	PURGING ENDED AT: 1005	TOTAL VOLUME PURGED (gallons): 4.9

Time	Volume Purged (gallons)	Cum. Volume Purged (gallons)	Purge Rate (gpm)	Depth to Water (ft BTOC)	pH (SU)	Temp. (°C)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	Salinity (‰)	ORP (mV)	Color/ Odor (describe)	Turbidity (NTUs)
0945	2.1	2.1	0.14	147.72	7.74	18.31	2.703	5.63	1.41	163.5	Clear none	0.03
0950	0.7	2.8	0.14	148.11	7.75	18.32	2.700	5.56	1.41	175.3	" "	0.03
0955	0.7	3.5	0.14	148.31	7.75	18.28	2.700	5.65	1.40	168.4	" "	0.10
1000	0.7	4.2	0.14	148.52	7.75	18.29	2.700	5.62	1.40	163.9	" "	0.11
1005	0.7	4.9	0.14	148.70	7.76	18.30	2.701	5.61	1.41	160.8	" "	0.12

WELL CAPACITY (gal/ft): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Ben Stewart Trinity	SAMPLER(S) SIGNATURE(S):	SAMPLE TIME: 1006
PUMP OR TUBING DEPTH IN WELL (feet): 152.6	TUBING MATERIAL CODE: LDPE	FIELD-FILTERED: (Y) N Filtration Equipment Type: inline FILTER SIZE: 1 µm

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced)

SAMPLE CONTAINER SPECIFICATION				INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	FIELD EQUIPMENT IDENTIFICATION
# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED				H20 QUALITY PARAMETER
							Model: YSI556 SN#: 08E100695
							TURBIDIMETER
							Model: HI98703 SN#: 08357015
							OTHER

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater)
Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

well needs repair _____ needs well tag ✓ locking cap: _____ other comment: _____

DI Water Lot # _____ MS / MSD MAO1MW002-MS MAO1MW002-SD Equip blk _____ Ambient blk _____ Trip blk TB-1

2012_1102

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services
www.trinityadc.com

Modified FDEP Form FD 9000-24

GROUNDWATER SAMPLING LOG

SYSTEM ON SYSTEM OFF x NOT APPLICABLE (NO SYSTEM)

SITE NAME: gwMU 130	SITE LOCATION: Melrose AFR, WM		DATE: 4-23-14
WELL NO: MA01MW003	SAMPLE ID: MA01MW003	FREE PRODUCT: Y (N) DEPTH TO PRODUCT (ft BTOC): NA	FIELD DUPLICATE: Y (N) DUPLICATE ID: NA

PURGING DATA

WELL DIAMETER (inches): 4	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 139.36 feet to 159.36 feet	STATIC DEPTH TO WATER (feet): 143.42	PURGE PUMP TYPE OR BAILER: QBP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) x WELL CAPACITY
(only fill out if applicable)
= (feet – feet) x gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY x TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.5 gallons + (0.0076 gallons/foot x 156 feet) + 0.25 gallons = 1.15 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 156.7	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 156.7	PURGING INITIATED AT: 1240	PURGING ENDED AT: 1307	TOTAL VOLUME PURGED (gallons): 3.78

Time	Volume Purged (gallons)	Cum. Volume Purged (gallons)	Purge Rate (gpm)	Depth to Water (ft BTOC)	pH (SU)	Temp. (°C)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	Salinity (‰)	ORP (mV)	Color/ Odor (describe)	Turbidity (NTUs)
1247	0.98	0.98	0.14	144.06	7.75	18.49	2.794	6.29	1.45	96.0	Clear no odor	0.21
1252	0.70	1.68	0.14	144.48	7.74	18.87	2.847	6.37	1.49	95.2	" "	0.11
1257	0.70	2.38	0.14	144.91	7.75	18.76	2.846	6.41	1.48	95.1	" "	0.14
1302	0.70	3.08	0.14	145.16	7.75	18.70	2.846	6.35	1.48	97.1	" "	0.19
1307	0.70	3.78	0.14	145.33	7.72	18.77	2.846	6.37	1.48	97.3	" "	0.22

WELL CAPACITY (gal/ft): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Ben Stewart Trinity	SAMPLER(S) SIGNATURE(S):	SAMPLE TIME: 1308
PUMP OR TUBING DEPTH IN WELL (feet): 156.7	TUBING MATERIAL CODE: LDPE	FIELD-FILTERED: (Y) N Filtration Equipment Type: inline FILTER SIZE: 1 µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	FIELD EQUIPMENT IDENTIFICATION

SAMPLE CONTAINER SPECIFICATION				INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	H20 QUALITY PARAMETER
# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED				Model: YSI 556 SN#: 08E100695
							TURBIDIMETER
							Model: HI 98703 SN#: 04835016
							OTHER

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater)
Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

well needs repair_____ needs well tag _____ locking cap: _____ other comment: _____

DI Water Lot # _____ MS / MSD _____ Equip blk _____ Ambient blk _____ Trip blk TB-1

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services
www.trinityadc.com

Modified FDEP Form FD 9000-24

GROUNDWATER SAMPLING LOG

SYSTEM ON SYSTEM OFF X NOT APPLICABLE (NO SYSTEM)

SITE NAME: SWMU 130	SITE LOCATION:	DATE: 4-24-14
WELL NO: MA01MW004	SAMPLE ID: MA01MW004	FREE PRODUCT: Y (N) DEPTH TO PRODUCT (ft BTOC): N/A
		FIELD DUPLICATE: Y (N) DUPLICATE ID: NA

PURGING DATA

WELL DIAMETER (inches): 4	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 140.08 feet to 160.08 feet	STATIC DEPTH TO WATER (feet): 143.40	PURGE PUMP TYPE OR BAILER: QBP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) x WELL CAPACITY
(only fill out if applicable)
= (feet – feet) x gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY x TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.5 gallons + (0.0076 gallons/foot x 154 feet) + 0.25 gallons = 1.15 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 157.4	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 157.4	PURGING INITIATED AT: 0930	PURGING ENDED AT: 1005	TOTAL VOLUME PURGED (gallons): 4.9

Time	Volume Purged (gallons)	Cum. Volume Purged (gallons)	Purge Rate (gpm)	Depth to Water (ft BTOC)	pH (SU)	Temp. (°C)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	Salinity (‰)	ORP (mV)	Color/ Odor (describe)	Turbidity (NTUs)
0945	2.1	2.1	0.14	145.79	7.76	18.16	1.778	6.89	0.90	220.7	Clear none	0.19
0950	0.7	2.8	0.14	145.95	7.76	18.10	1.777	6.87	0.90	214.9	" "	0.20
0955	0.7	3.5	0.14	146.20	7.77	18.14	1.777	6.91	0.90	211.8	" "	0.14
1000	0.7	4.2	0.14	146.65	7.78	18.15	1.776	6.92	0.90	210.2	" "	0.17
1005	0.7	4.9	0.14	146.81	7.78	18.14	1.775	6.97	0.90	207.6	" "	0.20

WELL CAPACITY (gal/ft): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Ben Stewart Trinity	SAMPLER(S) SIGNATURE(S):	SAMPLE TIME: 1010
PUMP OR TUBING DEPTH IN WELL (feet): 157.4	TUBING MATERIAL CODE: HDPE	FIELD-FILTERED: Y (N) Filtration Equipment Type: bladder FILTER SIZE: 1 µm

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced)

FIELD EQUIPMENT IDENTIFICATION

SAMPLE CONTAINER SPECIFICATION				INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED			

H20 QUALITY PARAMETER
Model: YSI556 SN#: 08E100695
TURBIDIMETER
Model: HI98703 SN#: 08357016
OTHER

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater)
Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

well needs repair_____ needs well tag _____ locking cap: _____ other comment: _____

DI Water Lot # _____ MS / MSD _____ Equip blk _____ Ambient blk _____ Trip blk TB-3

TRINITY ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services
www.trinityadc.com

Modified FDEP Form FD 9000-24

GROUNDWATER SAMPLING LOG

SYSTEM ON SYSTEM OFF Y NOT APPLICABLE (NO SYSTEM)

SITE NAME: SWMU 114	SITE LOCATION: Melrose AFR, NM		DATE: 4-24-14
WELL NO: M114MW001	SAMPLE ID: M114MW001	FREE PRODUCT: Y (N) DEPTH TO PRODUCT (ft BTOC): NM	FIELD DUPLICATE: Y (N) DUPLICATE ID: NA

PURGING DATA

WELL DIAMETER (inches): 4	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 159.39 feet to 179.39 feet	STATIC DEPTH TO WATER (feet): 151.18	PURGE PUMP TYPE OR BAILER: DBP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) x WELL CAPACITY
(only fill out if applicable)
= (feet – feet) x gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY x TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.5 gallons + (0.0026 gallons/foot x 173 feet) + 0.25 gallons = 1.20 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 176.7	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 176.7	PURGING INITIATED AT: 1402	PURGING ENDED AT: 1429	TOTAL VOLUME PURGED (gallons): 3.50

Time	Volume Purged (gallons)	Cum. Volume Purged (gallons)	Purge Rate (gpm)	Depth to Water (ft BTOC)	pH (SU)	Temp. (°C)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	Salinity (‰)	ORP (mV)	Color/ Odor (describe)	Turbidity (NTUs)
1409	0.70	0.70	0.14	152.45	7.74	18.65	12.68	1.12	7.32	81.7	clear none	0.23
1414	0.70	1.40	0.14	152.80	7.78	18.71	12.80	0.93	7.40	84.8	-- --	0.21
1419	0.70	2.1	0.14	153.03	7.81	18.69	12.84	0.78	7.41	85.9	-- --	0.19
1424	0.70	2.8	0.14	153.24	7.82	18.67	12.86	0.77	7.43	85.7	-- --	0.14
1429	0.70	3.5	0.14	153.47	7.83	18.69	12.84	0.70	7.41	88.2	-- --	0.10

WELL CAPACITY (gal/ft): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Benjamin Stewart Trinity	SAMPLER(S) SIGNATURE(S):	SAMPLE TIME: 1430
PUMP OR TUBING DEPTH IN WELL (feet): 176.7	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type: N/A FILTER SIZE: ___ µm

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced)

FIELD EQUIPMENT IDENTIFICATION

SAMPLE CONTAINER SPECIFICATION				INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED			

H20 QUALITY PARAMETER
Model: YSI 556 SN#: 08E100645
TURBIDIMETER
Model: HI98703 SN#: 08357616
OTHER

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater)
Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

well needs repair_____ needs well tag _____ locking cap: _____ other comment: _____

DI Water Lot # _____ MS / MSD _____ Equip blk _____ Ambient blk _____ Trip blk TB-4

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services
www.trinityadc.com

Modified FDEP Form FD 9000-24

GROUNDWATER SAMPLING LOG

SYSTEM ON SYSTEM OFF X NOT APPLICABLE (NO SYSTEM)

SITE NAME: SWMU 114	SITE LOCATION: Melrose AFR NM		DATE: 4-24-14
WELL NO: M114MW002	SAMPLE ID: M114MW002	FREE PRODUCT: Y (N) DEPTH TO PRODUCT (ft BTOC): NA	FIELD DUPLICATE: Y (N) DUPLICATE ID: NA

PURGING DATA

WELL DIAMETER (inches): 4	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 162.11 feet to 182.11 feet	STATIC DEPTH TO WATER (feet): 150.67	PURGE PUMP TYPE OR BAILER: DBP

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) x WELL CAPACITY
(only fill out if applicable)
= (feet – feet) x gallons/foot = gallons

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY x TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.5 gallons + (0.0026 gallons/foot x 175 feet) + 0.25 gallons = 1.21 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 179.4	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 179.4	PURGING INITIATED AT: 1240	PURGING ENDED AT: 1307	TOTAL VOLUME PURGED (gallons): 3.78

Time	Volume Purged (gallons)	Cum. Volume Purged (gallons)	Purge Rate (gpm)	Depth to Water (ft BTOC)	pH (SU)	Temp. (°C)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	Salinity (‰)	ORP (mV)	Color/ Odor (describe)	Turbidity (NTUs)
1247	0.98	0.98	0.14	152.79	7.85	18.60	12.61	0.58	7.27	162.2	Clear none	0.32
1252	0.70	1.68	"	152.91	7.84	18.52	12.61	0.54	7.26	157.2	" "	0.28
1257	0.70	2.38	"	153.40	7.84	18.52	12.59	0.52	7.25	153.1	" "	0.31
1302	0.70	3.08	"	153.65	7.83	18.54	12.57	0.48	7.24	151.4	" "	0.20
1307	0.70	3.78	"	153.89	7.84	18.47	12.57	0.47	7.24	150.4	" "	0.17

WELL CAPACITY (gal/ft): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Ben Stuart Trinity	SAMPLER(S) SIGNATURE(S):	SAMPLE TIME: 1308
PUMP OR TUBING DEPTH IN WELL (feet): 179.4	TUBING MATERIAL CODE: COPE	FIELD-FILTERED: (Y) N Filtration Equipment Type: In-line FILTER SIZE: 1 µm

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced)

FIELD EQUIPMENT IDENTIFICATION

SAMPLE CONTAINER SPECIFICATION				INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED			

H20 QUALITY PARAMETER
Model: YSI 556 SN#: 08E100695
TURBIDIMETER
Model: LT198703 SN#: 08357016
OTHER

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater)
Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

well needs repair_____ needs well tag _____ locking cap: _____ other comment: Split Sample

DI Water Lot # _____ MS / MSD _____ Equip blk _____ Ambient blk _____ Trip blk TB-4

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services
www.trinityadc.com

Modified FDEP Form FD 9000-24

GROUNDWATER SAMPLING LOG

SYSTEM ON SYSTEM OFF X NOT APPLICABLE (NO SYSTEM)

SITE NAME: SWMU 114	SITE LOCATION: Melrose AFR, NM	DATE: 4-25-14
WELL NO: M114MW004	SAMPLE ID: M114MW004	FREE PRODUCT: Y (N) DEPTH TO PRODUCT (ft BTOC): NA
		FIELD DUPLICATE: Y (N) DUPLICATE ID: NA

PURGING DATA

WELL DIAMETER (inches): 4	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 161.48 feet to 171.48 feet	STATIC DEPTH TO WATER (feet): 149.45	PURGE PUMP TYPE OR BAILER: QED

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) x WELL CAPACITY
(only fill out if applicable)
= (feet – feet) x gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY x TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.5 gallons + (0.0026 gallons/foot x 175 feet) + 0.25 gallons = 1.21 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 178.8	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 178.8	PURGING INITIATED AT: 0855	PURGING ENDED AT: 0920	TOTAL VOLUME PURGED (gallons): 3.5

Time	Volume Purged (gallons)	Cum. Volume Purged (gallons)	Purge Rate (gpm)	Depth to Water (ft BTOC)	pH (SU)	Temp. (°C)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	Salinity (‰)	ORP (mV)	Color/ Odor (describe)	Turbidity (NTUs)
0905	1.4	1.4	0.14	152.04	7.74	18.78	12.98	0.50	7.50	233.7	Clear none	0.34
0910	0.7	2.1	"	152.44	7.78	18.73	12.98	0.45	7.50	230.1	" "	0.30
0915	0.7	2.8	"	152.82	7.76	18.72	12.97	0.42	7.49	228.6	" "	0.33
0920	0.7	3.5	"	153.22	7.77	18.80	12.94	0.40	7.48	228.4	" "	0.29

WELL CAPACITY (gal/ft): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Ben Stewart Trinity	SAMPLER(S) SIGNATURE(S):	SAMPLE TIME: 0925
PUMP OR TUBING DEPTH IN WELL (feet): 178.8	TUBING MATERIAL CODE: LDPE	FIELD-FILTERED: (Y) N Filtration Equipment Type: inline FILTER SIZE: 1 µm

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced)

SAMPLE CONTAINER SPECIFICATION				INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED			

FIELD EQUIPMENT IDENTIFICATION

H20 QUALITY PARAMETER
Model: YSI 556 SN#: 08E100445

TURBIDIMETER
Model: HI 98703 SN#: 08357016

OTHER

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater)
Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

well needs repair_____ needs well tag _____ locking cap: _____ other comment: _____

DI Water Lot # _____ MS / MSD _____ Equip blk _____ Ambient blk _____ Trip blk TB-6

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services
www.trinityadc.com

Modified FDEP Form FD 9000-24

GROUNDWATER SAMPLING LOG

SYSTEM ON SYSTEM OFF X NOT APPLICABLE (NO SYSTEM)

SITE NAME: SWMU 114	SITE LOCATION: Melrose AFR, NM	DATE: 4-24-14
WELL NO: MW14MW003	SAMPLE ID: M14MW003	FREE PRODUCT: Y (N) DEPTH TO PRODUCT (ft BTOC): NA
		FIELD DUPLICATE: Y (N) DUPLICATE ID: NA

PURGING DATA

WELL DIAMETER (inches): 4	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 159.60 feet to 179.60 feet	STATIC DEPTH TO WATER (feet): 151.78	PURGE PUMP TYPE OR BAILER: QBP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) x WELL CAPACITY
(only fill out if applicable)
= (feet – feet) x gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY x TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.5 gallons + (0.0026 gallons/foot x 174 feet) + 0.25 gallons = 1.2 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 177	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 177	PURGING INITIATED AT: 1120	PURGING ENDED AT: 1155	TOTAL VOLUME PURGED (gallons): 4.9

Time	Volume Purged (gallons)	Cum. Volume Purged (gallons)	Purge Rate (gpm)	Depth to Water (ft BTOC)	pH (SU)	Temp. (°C)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	Salinity (‰)	ORP (mV)	Color/ Odor (describe)	Turbidity (NTUs)
1130	1.4	1.4	0.14	152.77	7.68	18.51	13.59	3.15	7.87	217.0	Clear none	0.34
1135	0.7	2.1	"	152.84	7.69	18.82	13.56	2.70	7.86	213.2	" "	0.29
1140	0.7	2.8	"	152.95	7.80	18.57	13.64	2.74	7.91	209.4	" "	0.21
1145	0.7	3.5	"	153.06	7.74	18.57	13.62	2.47	7.89	200.3	" "	0.19
1150	0.7	4.2	"	153.36	7.77	18.62	13.57	2.37	7.87	200.1	" "	0.22
1155	0.7	4.9	"	153.71	7.77	18.64	13.59	2.38	7.88	199.4	" "	0.14

WELL CAPACITY (gal/ft): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Ben Stewart Trinity	SAMPLER(S) SIGNATURE(S):	SAMPLE TIME: 1200
PUMP OR TUBING DEPTH IN WELL (feet): 177	TUBING MATERIAL CODE: LDPE	FIELD-FILTERED: (Y) N FILTER SIZE: 1 µm Filtration Equipment Type: In-line

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced)

SAMPLE CONTAINER SPECIFICATION				INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED			

FIELD EQUIPMENT IDENTIFICATION

H20 QUALITY PARAMETER
Model: YSI 556 SN#: 08E100645

TURBIDIMETER
Model: H198703 SN#: 08357016

OTHER

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: **1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater)
Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

well needs repair_____ needs well tag _____ locking cap: _____ other comment: _____

DI Water Lot # _____ MS / MSD _____ Equip blk _____ Ambient blk _____ Trip blk TB-3

TRINITY ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services
www.trinityadc.com

Modified FDEP Form FD 9000-24

GROUNDWATER SAMPLING LOG

SYSTEM ON SYSTEM OFF X NOT APPLICABLE (NO SYSTEM)

SITE NAME: Background	SITE LOCATION: Melrose AFR, NM	DATE: 4-25-14
WELL NO: MWQ-24	SAMPLE ID: MWQ-24	FREE PRODUCT: Y (N) DEPTH TO PRODUCT (ft BTOC): NA
		FIELD DUPLICATE: Y (N) DUPLICATE ID: NA

PURGING DATA

WELL DIAMETER (inches): 4	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 42.8 feet to 62.8 feet	STATIC DEPTH TO WATER (feet): 45.82	PURGE PUMP TYPE OR BAILER: QBP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) x WELL CAPACITY
(only fill out if applicable)
= (63.1 feet – 48.52 feet) x 0.65 gallons/foot = 9.49 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY x TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.5 gallons + (0.0026 gallons/foot x 57 feet) + 0.25 gallons = 0.89 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 60.1	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 60.1	PURGING INITIATED AT: 1035	PURGING ENDED AT: 1055	TOTAL VOLUME PURGED (gallons): 2.80

Time	Volume Purged (gallons)	Cum. Volume Purged (gallons)	Purge Rate (gpm)	Depth to Water (ft BTOC)	pH (SU)	Temp. (°C)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	Salinity (‰)	ORP (mV)	Color/ Odor (describe)	Turbidity (NTUs)
1040	0.7	0.7	0.14	49.01	7.66	17.53	0.520	6.29	0.25	180.0	clear none	0.55
1045	0.7	1.4	"	49.02	7.67	17.50	0.519	6.24	0.25	170.1	" "	0.51
1050	0.7	2.1	"	49.08	7.67	17.59	0.519	6.24	0.25	165.7	" "	0.48
1055	0.7	2.8	"	49.15	7.67	17.55	0.519	6.27	0.25	164.0	" "	0.37

WELL CAPACITY (gal/ft): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Ben Stewart Trinity	SAMPLER(S) SIGNATURE(S):	SAMPLE TIME: 1100
PUMP OR TUBING DEPTH IN WELL (feet): 60.1	TUBING MATERIAL CODE: LDPE	FIELD-FILTERED: (Y) N FILTER SIZE: 1 µm Filtration Equipment Type: In-line

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced)

FIELD EQUIPMENT IDENTIFICATION

SAMPLE CONTAINER SPECIFICATION				INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED			

H20 QUALITY PARAMETER
Model: 751556 SN#: 08E10069 5
TURBIDIMETER
Model: H198703 SN#: 05357016
OTHER

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater)
Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

well needs repair_____ needs well tag _____ locking cap: _____ other comment: _____

DI Water Lot # _____ MS / MSD _____ Equip blk _____ Ambient blk _____ Trip blk TB-6

TRINITY ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services
www.trinityadc.com

Modified FDEP Form FD 9000-24

GROUNDWATER SAMPLING LOG

☐ SYSTEM ON ☐ SYSTEM OFF X NOT APPLICABLE (NO SYSTEM)

SITE NAME:	SITE LOCATION:	DATE:
	Moose AFF	10-21-14

WELL NO:	SAMPLE ID:	FREE PRODUCT: Y (N) DEPTH TO PRODUCT (ft BTOC): NA	FIELD DUPLICATE: Y (N) DUPLICATE ID: NA
MA01MW003	MA01MW003		

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
4	1/4	142.11 feet to 162.11 feet (btoc)	143.68 (btoc)	DBP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) x WELL CAPACITY (only fill out if applicable)

= (feet – feet) x gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY x TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)

= 0.10 gallons + (0.0026 gallons/foot x ~~159.45~~ 153.32 feet) + 0.25 gallons = 0.75 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
158.45	159.45 btoc	1152	1225	2.69

Time	Volume Purged (gallons)	Cum. Volume Purged (gallons)	Purge Rate (gpm)	Depth to Water (ft BTOC)	pH (SU)	Temp. (°C)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	Salinity (‰)	ORP (mV)	Color/ Odor (describe)	Turbidity (NTUs)
1202	0.80	0.80	0.08	145.14	7.88	18.33	2.891	6.22	1.51	74.0	clear none	1.20
1210	0.64	1.44	0.08	145.71	7.87	18.28	2.888	6.23	1.51	78.0	clear none	0.19
1215	0.40	1.84	0.08	146.23	7.86	18.27	2.884	6.20	1.51	81.4	clear none	0.14
1220	0.40	2.24	0.08	146.64	7.85	18.22	2.879	6.20	1.50	84.5	clear none	0.11
1225	0.40	2.64	0.08	147.12	7.85	18.26	2.871	6.26	1.50	86.8	clear none	0.09

WELL CAPACITY (gal/ft): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLE TIME:
Benjamin Stewart Trinity ADC		1226

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: (Y) N Filtration Equipment Type: In Line	FILTER SIZE: 0.45 µm
btoc 159.45			

FIELD DECONTAMINATION: PUMP Y (N) TUBING (Y) N (replaced)

FIELD EQUIPMENT IDENTIFICATION

SAMPLE CONTAINER SPECIFICATION				INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED			
3	CG	40mL	HCL	8260B	DBP	
2	AG	1L	—	Explosives	DBP	
1	PE	250mL	—	6860	DBP	
1	PE	250mL	Buffer Na2HPO4·7H2O	218.6	DBP	
2	PE	250mL	HNO3	Total/Diss Metals	DBP	
1	PE	1L	NaOH	Cyanide	DBP	
REMARKS: 1	PE	1L	—			

H20 QUALITY PARAMETER
Model: YSI 556 SN#: 09M 101019
TURBIDIMETER
Model: HI98703 SN#: 06373434
OTHER

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES:
1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater)
Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

☐ well needs repair No ☐ needs well tag No ☐ locking cap: — ☐ other comment: —

☐ DI Water Lot # — ☐ MS / MSD — ☐ Equip blk — ☐ Ambient blk — ☐ Trip blk —

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services
www.trinityadc.com

Modified FDEP Form FD 9000-24

GROUNDWATER SAMPLING LOG

☐ SYSTEM ON ☐ SYSTEM OFF X NOT APPLICABLE (NO SYSTEM)

SITE NAME:	SITE LOCATION: Melrose AFR, NM	DATE: 10-21-14
WELL NO: MA01MW004	SAMPLE ID: MA01MW004	FREE PRODUCT: Y (N) DEPTH TO PRODUCT (ft BTOC): NA
		FIELD DUPLICATE: (Y) N DUPLICATE ID: MA01MW004-a

PURGING DATA

WELL DIAMETER (inches): 4	TUBING DIAMETER (inches): 3/8 1/4	WELL SCREEN INTERVAL DEPTH: 142.69 feet to 167.69 feet btoc	STATIC DEPTH TO WATER (feet): 143.69	PURGE PUMP TYPE OR BAILER: DBP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) x WELL CAPACITY
(only fill out if applicable)
= (feet – feet) x gallons/foot = 1.85 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY x TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.5 gallons + (0.0026 gallons/foot x 153.6 feet) + 0.25 gallons = 1.15 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 160 153.5 btoc	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 160 153.5 btoc	PURGING INITIATED AT: 1000	PURGING ENDED AT: 1059	TOTAL VOLUME PURGED (gallons): 3.47

Time	Volume Purged (gallons)	Cum. Volume Purged (gallons)	Purge Rate (gpm)	Depth to Water (ft BTOC)	pH (SU)	Temp. (°C)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	Salinity (‰)	ORP (mV)	Color/ Odor (describe)	Turbidity (NTUs)
1000			.03									15
1015			0.08	increased flow								
1030	1.15	1.15	0.08	145.15	7.81	18.43	1.874	6.91	0.96	113.6	clear none	0.33
1033	0.24	1.39	0.08	145.36	7.83	18.54	1.871	6.88	0.96	112.2	clear none	0.21
1038	0.40	1.79	0.08	145.56	7.81	18.77	1.875	6.61	0.96	109.8	clear none	0.14
1043	0.40	2.19	0.08	145.57	7.84	19.04	1.878	6.80	0.96	107.5	clear none	0.19
1053	0.80	2.99	0.08	146.46	7.85	18.37	1.875	7.18	0.96	105.8	clear none	0.13
1056	0.24	3.23	0.08	146.48	7.85	18.37	1.875	7.20	0.96	105.7	clear none	0.15
1059	0.24	3.47	0.08	146.51	7.85	18.33	1.875	7.22	0.96	105.0	clear none	0.11

WELL CAPACITY (gal/ft): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Benjamin Stewart Trinity ADC	SAMPLER(S) SIGNATURE(S):	SAMPLE TIME: 1100
PUMP OR TUBING DEPTH IN WELL (feet): 160 153.5 btoc	TUBING MATERIAL CODE: PE	FIELD-FILTERED: (Y) N Filtration Equipment Type: inline FILTER SIZE: 0.45 µm

FIELD DECONTAMINATION: PUMP Y (N) TUBING (Y) N (replaced)

FIELD EQUIPMENT IDENTIFICATION

SAMPLE CONTAINER SPECIFICATION				INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED			

H20 QUALITY PARAMETER
Model: YSI 556 SN#: 09M1010 19
TURBIDIMETER
Model: HI 98703 SN#: 08393431
OTHER

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater)
Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

☐ well needs repair No ☐ needs well tag — ☐ locking cap: — ☐ other comment: —
☐ DI Water Lot # — ☐ MS / MSD — ☐ Equip blk — ☐ Ambient blk — ☐ Trip blk —

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services
www.trinityadc.com

Modified FDEP Form FD 9000-24

GROUNDWATER SAMPLING LOG

☐ SYSTEM ON ☐ SYSTEM OFF ☒ NOT APPLICABLE (NO SYSTEM)

SITE NAME:	SITE LOCATION: Melrose AFR	DATE: 10-23-14
WELL NO: MA03MW0010	SAMPLE ID: MA03MW0010	FREE PRODUCT: Y (N) DEPTH TO PRODUCT (ft BTOC): NA
		FIELD DUPLICATE: Y (N) DUPLICATE ID: NA

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 164.66 feet to 184.66 feet	STATIC DEPTH TO WATER (feet): 105.65	PURGE PUMP TYPE OR BAILER: DBP

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) x WELL CAPACITY
(only fill out if applicable)
= (feet – feet) x gallons/foot = gallons

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY x TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.10 gallons + (0.0026 gallons/foot x 178.51 feet) + 0.25 gallons = 0.81 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 182.01	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 182.01	PURGING INITIATED AT: 1110	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):

Time	Volume Purged (gallons)	Cum. Volume Purged (gallons)	Purge Rate (gpm)	Depth to Water (ft BTOC)	pH (SU)	Temp. (°C)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	Salinity (‰)	ORP (mV)	Color/ Odor (describe)	Turbidity (NTUs)
1120	1.04	1.04	0.104	106.36	7.75	18.71	9.892	2.76	5.59	176.4	clear none	20 0.33
1125	0.52	1.56	0.104	107.05	7.77	18.45	11.17	0.16	6.35	170.9	clear none	0.19
1130	0.52	2.08	0.104	107.61	7.81	18.40	10.57	0.11	5.99	163.4	clear none	0.12
1133	0.312	2.39	0.104	108.10	7.83	18.41	10.35	0.09	5.81	157.9	clear none	0.14
1136	0.312	2.70	0.104	108.53	7.83	18.40	10.10	0.10	5.72	154.2	clear none	0.21
1139	0.312	3.02	0.104	108.76	7.83	18.40	10.02	0.11	5.67	150.8	clear none	0.19
1142	0.312	3.33	0.104	109.12	7.83	18.39	10.01	0.10	5.64	150.1	clear none	0.21

WELL CAPACITY (gal/ft): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Benjamin Stewart Trinity	SAMPLER(S) SIGNATURE(S):	SAMPLE TIME: 1143
PUMP OR TUBING DEPTH IN WELL (feet): 182.01	TUBING MATERIAL CODE: LDPE	FIELD-FILTERED: (Y) N Filtration Equipment Type: In Line FILTER SIZE: 0.45 µm

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced)

SAMPLE CONTAINER SPECIFICATION				INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	FIELD EQUIPMENT IDENTIFICATION
# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED				H20 QUALITY PARAMETER Model: YSI 556 SN#: 09F 101604
							TURBIDIMETER Model: HI 98703 SN#: 08390705
							OTHER

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater)
Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

☐ well needs repair No ☐ needs well tag — ☐ locking cap: — ☐ other comment: Collected Sp 1,7 to send to Accutest (12)
☐ DI Water Lot # — ☐ MS / MSD — ☐ Equip blk — ☐ Ambient blk — ☐ Trip blk —

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services
www.trinityadc.com

Modified FDEP Form FD 9000-24

GROUNDWATER SAMPLING LOG

☐ SYSTEM ON ☐ SYSTEM OFF ☒ NOT APPLICABLE (NO SYSTEM)

SITE NAME:	SITE LOCATION: Melrose AFR, NM	DATE: 10-23-14
WELL NO: MWQ-24	SAMPLE ID: MWQ-24	FREE PRODUCT: Y (N) NA DEPTH TO PRODUCT (ft BTOC):	FIELD DUPLICATE: Y (N) DUPLICATE ID: NA

PURGING DATA

WELL DIAMETER (inches): 4	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 44.43 feet to 64.43 feet	STATIC DEPTH TO WATER (feet): 45.96	PURGE PUMP TYPE OR BAILER: DBP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) x WELL CAPACITY
(only fill out if applicable)
= (feet – feet) x gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY x TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.10 gallons + (0.0026 gallons/foot x 58.23 feet) + 0.25 gallons = 0.50 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 61.73	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 61.73	PURGING INITIATED AT: 0900	PURGING ENDED AT: 0931	TOTAL VOLUME PURGED (gallons): 3.22

Time	Volume Purged (gallons)	Cum. Volume Purged (gallons)	Purge Rate (gpm)	Depth to Water (ft BTOC)	pH (SU)	Temp. (°C)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	Salinity (‰)	ORP (mV)	Color/ Odor (describe)	Turbidity (NTUs)
0910	1.04	1.04	0.104									
0915	0.52	1.56	0.104	46.44	7.00	17.06	0.552	7.37	0.27	218.6	clear none	0.70
0920	0.52	2.09	0.104	46.44	7.03	17.06	0.543	7.35	0.26	219.8	Clear none	0.69
0925	0.52	2.60	0.104	46.51	7.10	17.07	0.541	7.20	0.26	220.3	Clear none	0.72
0929	0.312	2.91	0.104	46.51	7.16	17.07	0.540	7.20	0.26	217.2	Clear none	0.45
0931	0.312	3.22	0.104	46.51	7.16	17.11	0.540	7.28	0.26	217.8	Clear none	0.21

WELL CAPACITY (gal/ft): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Benjamin Stewart Trinity	SAMPLER(S) SIGNATURE(S):	SAMPLE TIME: 0932
PUMP OR TUBING DEPTH IN WELL (feet): 61.73	TUBING MATERIAL CODE: HDPE	FIELD-FILTERED: Y (N) Filtration Equipment Type: In Line	FILTER SIZE: ____ µm

FIELD DECONTAMINATION: PUMP Y (N) TUBING (Y) N (replaced)

FIELD EQUIPMENT IDENTIFICATION

SAMPLE CONTAINER SPECIFICATION				INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED			

H20 QUALITY PARAMETER
Model: 451556 SN#: 09F101604
TURBIDIMETER
Model: M198703 SN#: 08390705
OTHER

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater)
Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

☐ ell needs repair _____ ☐ needs well tag _____ ☐ locking cap: _____ ☐ other comment: _____

☐ ter Lot # _____ ☐ MS / MSD Y ☐ Equip blk _____ ☐ Ambient blk _____ ☐ Trip blk _____

MWQ24-MS
MWQ-24-SD

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services
www.trinityadc.com

Modified FDEP Form FD 9000-24

GROUNDWATER SAMPLING LOG

☐ SYSTEM ON ☐ SYSTEM OFF ☐ NOT APPLICABLE (NO SYSTEM)

SITE NAME:	SITE LOCATION:	DATE: 10/22/14
WELL NO:	SAMPLE ID: M114 MW001	FREE PRODUCT: Y N DEPTH TO PRODUCT (ft BTOC):	FIELD DUPLICATE: Y (N) DUPLICATE ID:

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH: 159 feet to 179 feet	STATIC DEPTH TO WATER (feet): 151.69	PURGE PUMP TYPE OR BAILER: Bladder

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) x WELL CAPACITY
(only fill out if applicable)
= (feet – feet) x gallons/foot = gallons

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY x TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot x feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT: 1105	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):

Time	Volume Purged (gallons)	Cum. Volume Purged (gallons)	Purge Rate (gpm)	Depth to Water (ft BTOC)	pH (SU) ✓	Temp. (°C) ✓	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L) ✓	Salinity (‰)	ORP (mV) ✓	Color/ Odor (describe) ✓	Turbidity (NTUs) ✓
1105	–	–	0.104	151.69	–	–	–	–	–	–	–	–
1125	2.08	2.08	0.104	154.03	7.73	18.51	12.74	0.64	7.35	91.4	clear/None	0.15
1135	1.04	3.12	0.104	155.66	7.72	18.45	12.45	0.27	7.16	84.5	" "	0.23
1145	1.04	4.16	0.104	156.50	7.69	18.48	12.14	0.19	6.97	82.7	" "	0.28
1155	1.04	5.20	0.104	157.90	7.68	18.44	11.66	0.16	6.67	74.7	" "	0.35
1205	1.04	6.24	0.104	158.90	7.64	18.58	11.30	0.15	6.45	74.5	" "	0.10
1215	1.04	7.28	0.104	159.92	7.63	18.59	11.07	0.17	6.31	70.5	" "	0.22
1225	1.04	8.32	0.104	160.87	7.63	18.68	10.92	0.25	6.22	66.3	" "	0.29
1235	1.04	9.36	0.104	161.91	7.60	18.56	10.89	0.26	6.20	67.9	" "	0.15

WELL CAPACITY (gal/ft): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLE TIME: 1235
PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm

FIELD DECONTAMINATION: PUMP Y N TUBING Y N (replaced)

FIELD EQUIPMENT IDENTIFICATION

SAMPLE CONTAINER SPECIFICATION				INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED			

H20 QUALITY PARAMETER
Model: SN#:
TURBIDIMETER
Model: SN#:
OTHER

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: **1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater)
Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

☐ well needs repair_____ ☐ needs well tag _____ ☐ locking cap: _____ ☐ other comment: _____
☐ DI Water Lot # _____ ☐ MS / MSD _____ ☐ Equip blk _____ ☐ Ambient blk _____ ☐ Trip blk _____

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services
www.trinityadc.com

Modified FDEP Form FD 9000-24

GROUNDWATER SAMPLING LOG

☐ SYSTEM ON ☐ SYSTEM OFF ☒ NOT APPLICABLE (NO SYSTEM)

SITE NAME:	SITE LOCATION: Melrose AFR, NM	DATE: 10/22/14
WELL NO: M114MW002	SAMPLE ID: M114MW002	FREE PRODUCT: Y (N) DEPTH TO PRODUCT (ft BTOC): —
		FIELD DUPLICATE: Y (N) DUPLICATE ID: NA

PURGING DATA

WELL DIAMETER (inches): 4	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 164.86 feet to 184.86 feet (btoc)	STATIC DEPTH TO WATER (feet): 150.99	PURGE PUMP TYPE OR BAILER: QBP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) x WELL CAPACITY
(only fill out if applicable)
= (feet – feet) x gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY x TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.10 gallons + (0.0026 gallons/foot x ~~175.9~~ ~~175.15~~ feet) + 0.25 gallons = 0.80 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): ~~176.5~~ 182.15 (btoc)	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 176.64 182.15 (btoc)	PURGING INITIATED AT: 0903	PURGING ENDED AT: 0934	TOTAL VOLUME PURGED (gallons): 4.34

Time	Volume Purged (gallons)	Cum. Volume Purged (gallons)	Purge Rate (gpm)	Depth to Water (ft BTOC)	pH (SU)	Temp. (°C)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	Salinity (‰)	ORP (mV)	Color/ Odor (describe)	Turbidity (NTUs)
0915	1.68	1.68	0.14	152.60	7.67	18.09	12.79	1.34	7.38	216.1	Clear none	0.20
0920	0.70	2.38	0.14	153.35	7.79	18.15	12.87	0.61	7.42	209.4	Clear none	0.17
0925	0.70	3.08	0.14	153.84	7.83	18.16	12.85	0.56	7.41	205.7	Clear none	0.11
0928	0.42	3.50	0.14	154.34	7.87	18.20	12.81	0.58	7.39	202.1	Clear none	0.16
0931	0.42	3.92	0.14	154.66	7.88	18.19	12.73	0.59	7.34	200.3	Clear none	0.19
0934	0.42	4.34	0.14	155.10	7.92	18.17	12.73	0.63	7.26	196.7	Clear none	0.14

WELL CAPACITY (gal/ft): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Benjamin Stewart Trinity ADC	SAMPLER(S) SIGNATURE(S):	SAMPLE TIME: 0935
PUMP OR TUBING DEPTH IN WELL (feet): ~~176.5~~ 182.15 (btoc)	TUBING MATERIAL CODE: LDPE	FIELD-FILTERED: (Y) N FILTER SIZE: 0.45 µm Filtration Equipment Type: in line

FIELD DECONTAMINATION: PUMP Y (N) TUBING (Y) N (replaced)

FIELD EQUIPMENT IDENTIFICATION

SAMPLE CONTAINER SPECIFICATION				INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED			

H20 QUALITY PARAMETER
Model: YSI 556 SN#: 09M1010 19
TURBIDIMETER
Model: HI98703 SN#: 08393434
OTHER

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater)
Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

☐ well needs repair — ☐ needs well tag — ☐ locking cap: — ☐ other comment: —

☐ DI Water Lot # — ☐ MS / MSD — ☐ Equip blk — ☐ Ambient blk — ☐ Trip blk —

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services
www.trinityadc.com

Modified FDEP Form FD 9000-24

GROUNDWATER SAMPLING LOG

☐ SYSTEM ON ☐ SYSTEM OFF ☑ NOT APPLICABLE (NO SYSTEM)

SITE NAME:	SITE LOCATION: Melrose AFR, NM	DATE: 10-22-14
WELL NO: M114MW003	SAMPLE ID: M114MW003	FREE PRODUCT: Y (N) DEPTH TO PRODUCT (ft BTOC): NA
		FIELD DUPLICATE: Y (N) DUPLICATE ID: NA

PURGING DATA

WELL DIAMETER (inches): 4	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 162.37 feet to 172.37 feet btoc	STATIC DEPTH TO WATER (feet): 151.94 btoc	PURGE PUMP TYPE OR BAILER: QBP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) x WELL CAPACITY
(only fill out if applicable)
= (feet – feet) x gallons/foot = 18 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY x TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.10 gallons + (0.0026 gallons/foot x 173.5 ~~176.75~~ feet) + 0.25 gallons = 0.80 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 179.75 btoc	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 179.75 btoc	PURGING INITIATED AT: 1033	PURGING ENDED AT: 1109	TOTAL VOLUME PURGED (gallons): 5.04

Time	Volume Purged (gallons)	Cum. Volume Purged (gallons)	Purge Rate (gpm)	Depth to Water (ft BTOC)	pH (SU)	Temp. (°C)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	Salinity (‰)	ORP (mV)	Color/ Odor (describe)	Turbidity (NTUs)
1043	1.40	1.40	0.14	153.12	7.99	18.28	13.74	3.52	7.98	153.4	clear none	0.43
1053	1.40	2.80	0.14	154.50	8.06	18.70	13.68	2.77	7.95	147.4	clear none	0.23
1103	1.40	4.20	0.14	155.94	8.10	18.76	13.73	2.64	7.96	138.1	clear none	0.65
1106	0.47	4.67	0.14	156.69	8.13	18.75	13.74	2.63	7.96	134.2	clear none	0.23
1109	0.42	5.04	0.14	156.91	8.13	18.81	13.72	2.61	7.96	134.3	clear none	0.42

WELL CAPACITY (gal/ft): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Benjamin Stuart Trinity	SAMPLER(S) SIGNATURE(S):	SAMPLE TIME: 1110
PUMP OR TUBING DEPTH IN WELL (feet): 179.75 btoc	TUBING MATERIAL CODE: LDPE	FIELD-FILTERED: (Y) N Filtration Equipment Type: in line FILTER SIZE: 0.45 µm

FIELD DECONTAMINATION: PUMP Y (N) TUBING (Y) N (replaced)

FIELD EQUIPMENT IDENTIFICATION

SAMPLE CONTAINER SPECIFICATION				INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED			

H20 QUALITY PARAMETER
Model: YSI 556 SN#: 09M1016 19
TURBIDIMETER
Model: HI 98703 SN#: 03393434
OTHER

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater)
Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

☐ well needs repair_____ ☐ needs well tag _____ ☐ locking cap: _____ ☐ other comment: _____

☐ DI Water Lot # _____ ☐ MS / MSD _____ ☐ Equip blk _____ ☐ Ambient blk _____ ☐ Trip blk _____

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services
www.trinityadc.com

Modified FDEP Form FD 9000-24

149.90
151.69 1105

GROUNDWATER SAMPLING LOG

☐ SYSTEM ON ☐ SYSTEM OFF ☐ NOT APPLICABLE (NO SYSTEM)

SITE NAME: Melrose AFR	SITE LOCATION: SWMU 114	DATE: 10-22-14
WELL NO: M114 MW004	SAMPLE ID: M114 MW004	FREE PRODUCT: Y (N) DEPTH TO PRODUCT (ft BTOC):
		FIELD DUPLICATE: Y (N) DUPLICATE ID:

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH: 1408 feet to 160.08 feet	STATIC DEPTH TO WATER (feet): 149.90	PURGE PUMP TYPE OR BAILER: bladder

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) x WELL CAPACITY
(only fill out if applicable)
= (Not applicable feet – feet) x gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY x TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
390mL
= gallons + (gallons/foot x feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT: 1025	TOTAL VOLUME PURGED (gallons):

Time	Volume Purged (gallons)	Cum. Volume Purged (gallons)	Purge Rate (gpm)	Depth to Water (ft BTOC)	pH (SU)	Temp. (°C)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	Salinity (‰)	ORP (mV)	Color/ Odor (describe)	Turbidity (NTUs)
925	–	–	0.104	149.90								
945	2.08	2.08	0.104	152.30	7.59	18.22	12.89	0.71	7.44	178.3	clear / None	0.46
955	1.04	3.12	0.104	152.82	7.63	18.19	12.85	0.63	7.41	170.1	" "	0.42
1005	1.04	4.16	0.104	153.10	7.66	18.23	12.82	0.53	7.39	156.0	" "	0.59
1015	1.04	5.20	0.104	153.69	7.62	18.32	12.70	0.47	7.32	140.4	" "	0.29
1020	0.52	5.72	0.104	155.80	7.62	18.45	12.64	0.45	7.29	139.2	" "	0.33
1025	0.52	6.24	0.104	156.20	7.61	18.33	12.60	0.42	7.26	139.4	" "	0.35

WELL CAPACITY (gal/ft): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLE TIME: 1025
PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y N Filtration Equipment Type: FILTER SIZE: ____ µm

FIELD DECONTAMINATION: PUMP Y N TUBING Y N (replaced) — FIELD EQUIPMENT IDENTIFICATION

SAMPLE CONTAINER SPECIFICATION				INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	H20 QUALITY PARAMETER
# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED				Model: SN#:
							TURBIDIMETER
							Model: SN#:
							OTHER

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: **1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater)
Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

☐ well needs repair_____ ☐ needs well tag _____ ☐ locking cap: _____ ☐ other comment: _____
☐ DI Water Lot # _____ ☐ MS / MSD _____ ☐ Equip blk _____ ☐ Ambient blk _____ ☐ Trip blk _____

106
2
2.08

52
52
104

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services
www.trinityadc.com

Modified FDEP Form FD 9000-24

GROUNDWATER SAMPLING LOG

☐ SYSTEM ON ☐ SYSTEM OFF ☐ NOT APPLICABLE (NO SYSTEM)

SITE NAME: MOIZOOI AFR	SITE LOCATION: SWMU-130	DATE: 10-21-14
WELL NO: MAOIMW001	SAMPLE ID: MAOIMW001	FREE PRODUCT: Y (N) DEPTH TO PRODUCT (ft BTOC):	FIELD DUPLICATE: Y (N) DUPLICATE ID:

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH: 141.36 feet to 161.56 feet	STATIC DEPTH TO WATER (feet): 142.70	PURGE PUMP TYPE OR BAILER: BLADDER

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) x WELL CAPACITY (only fill out if applicable) Not applicable

= (feet – feet) x gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY x TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)

= 0.104 gallons + (0.006 gallons/foot x 3 feet) + 0.25 gallons = 0.372 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 158.9	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 158.9	PURGING INITIATED AT: 1137	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):

Time	Volume Purged (gallons)	Cum. Volume Purged (gallons)	Purge Rate (gpm)	Depth to Water (ft BTOC)	pH (SU)	Temp. (°C)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	Salinity (‰)	ORP (mV)	Color/ Odor (describe)	Turbidity (NTUs)
1155	1.872	1.872	0.104	143.75	7.81	18.49	3.284	5.63	1.73	125.0	clear/None	0.33
1205	1.04	2.912	0.104	144.32	7.79	18.41	3.279	5.48	1.72	122.5	" "	0.46
1215	1.04	3.952	0.104	144.82	7.77	18.39	3.265	5.43	1.72	125.3	" "	0.42
1220	0.502	4.454	0.104	145.20	7.79	18.39	3.260	5.48	1.71	121.7	" "	0.22

WELL CAPACITY (gal/ft): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLE TIME: 1220
PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm

FIELD DECONTAMINATION: PUMP Y N TUBING Y N (replaced) | FIELD EQUIPMENT IDENTIFICATION

SAMPLE CONTAINER SPECIFICATION				INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED			

H20 QUALITY PARAMETER
Model: SN#:
TURBIDIMETER
Model: SN#:
OTHER

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater)
Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

☐ well needs repair_____ ☐ needs well tag _____ ☐ locking cap: _____ ☐ other comment: _____

☐ DI Water Lot # _____ ☐ MS / MSD _____ ☐ Equip blk _____ ☐ Ambient blk _____ ☐ Trip blk _____

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services
www.trinityadc.com

Modified FDEP Form FD 9000-24

Jonathan Kramer

GROUNDWATER SAMPLING LOG

pump 1101 PVC

☐ SYSTEM ON ☐ SYSTEM OFF ☐ NOT APPLICABLE (NO SYSTEM)

SITE NAME: Melrose AFB	SITE LOCATION: Sumu 130	DATE: 10-21-2014
WELL NO: MA01MW002	SAMPLE ID: MA01MW002	FREE PRODUCT: Y (N) DEPTH TO PRODUCT (ft BTOC):
		FIELD DUPLICATE: Y (N) DUPLICATE ID:

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH: 145.3 feet to 155.3 feet	STATIC DEPTH TO WATER (feet): 142.73	PURGE PUMP TYPE OR BAILER: bladder/dad

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) x WELL CAPACITY
(only fill out if applicable)
= (not applicable feet – feet) x gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY x TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.104 gallons + (0.006 gallons/foot x 3 feet) + 0.25 gallons = 0.372 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 152.6	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 152.6	PURGING INITIATED AT: 942	PURGING ENDED AT: 1040	TOTAL VOLUME PURGED (gallons):

Time	Volume Purged (gallons)	Cum. Volume Purged (gallons)	Purge Rate (gpm)	Depth to Water (ft BTOC)	pH (SU)	Temp. (°C)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	Salinity (‰)	ORP (mV)	Color/ Odor (describe)	Turbidity (NTUs)
942	Start	–	0.104	–	–	–	–	–	–	–	–	–
953	1.144	1.144	Stop	pump to	switch	air lines	w/	Bow.	–	–	–	–
1004	Start	1.144	0.104	–	–	–	–	–	–	–	–	–
1010	0.624	1.768	0.104	–	7.87	18.86	2.901	5.17	1.51	154.5	clear/None	–
1020	1.04	2.808	0.104	144.80	7.88	18.89	2.894	4.99	1.51	149.1	"	0.33
1025	1.04	3.848	0.104	145.27	7.89	18.80	2.896	5.23	1.51	147.1	"	0.72
1030	1.04	4.888	0.104	145.95	7.84	18.84	2.836	5.76	1.48	146.0	"	0.51
1035	1.04	5.892	0.104	146.44	7.83	18.88	2.808	5.79	1.46	146.4	"	0.42
1040	1.04	6.896	0.104	147.14	7.83	18.88	2.800	5.77	1.46	146.7	"	0.80

WELL CAPACITY (gal/ft): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Trinity Analysis	SAMPLER(S) SIGNATURE(S): Jonathan Kramer	SAMPLE TIME: 1040
PUMP OR TUBING DEPTH IN WELL (feet): 152.6	TUBING MATERIAL CODE:	FIELD-FILTERED: (Y) N Filtration Equipment Type: FILTER SIZE: 45 µm

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced)

FIELD EQUIPMENT IDENTIFICATION

SAMPLE CONTAINER SPECIFICATION				INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
# CONTAINERS	MATERIAL CODE	VOLUME (mL)	PRESERVATIVE USED			
1	PE	1000	NaOH	cyanide	BP	0.104 gal
2	AG	1000	none	explosives	"	"
1	PE	1000	None	various	"	"
2	PP	250	HNO_3	Metals	"	"
1	PE	250	buffer	Cr+6	"	"
1	PE	250	None	perchlo	"	"
3	CG	100	HCL	VOCs	"	"

H20 QUALITY PARAMETER
Model: SN#:
TURBIDIMETER
Model: SN#:
OTHER

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater)
Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

☐ well needs repair_____ ☐ needs well tag _____ ☐ locking cap: _____ ☐ other comment: _____

☐ DI Water Lot # _____ ☐ MS / MSD _____ ☐ Equip blk _____ ☐ Ambient blk _____ ☐ Trip blk _____

pump vol = 395 mL / 0.104 gallons Notes:
timing 30/30 on controller

Chain of Custodies

This page intentionally left blank

TRINITY ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Project Number: A012-107

Chain of Custody Number (1): 14042501

Project Name / Site Name: Melrose Semi Spring 2014

Facility: Melrose Air Force Range

Client Name: USACE ABQ

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart 251-709-6509

Turn Around Time

24 Hour ☐
7 Day ☐
Standard X
Other ☐

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	Sample Code (2)	Sample Number (3)	Sample Matrix (4)	Sample Method (5)	Number of Containers	VOCs 8260B	Explosives 8330	Metals (Total & Diss.) 6020A	Cyanide 9012A	Mercury 7470A	Nitrate, Nitrite 300.0	Chloride, Sulfate 300.0	Perchlorate 6860	Alkalinity 2320B	TDS 2540C	Thallium (Total and Dissolved) 6020A	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID (Alphabetical Notation)
M114MW004		25042014	0925		N	1	WG		10	X	X	X	X	X	X	X	X	X	X	X				A
MW24		25042014	1100		N	1	WG		10	X	X	X	X	X	X	X	X	X	X	X				A
TB-6		25042014	0925		TB	1	WQ		3	X														A
MA03MW003D		25042014	1252		N	1	WG		10	X	X	X	X	X	X	X	X	X	X	X				B
MA03MW003D-a		25042014	1252		FD	1	WG		10	X	X	X	X	X	X	X	X	X	X	X				B
TB-7		25042014	1252		TB	1	WQ		3	X														B
				-																				
				-																				
				-																				
				-																				
				-																				
				-																				
				-																				
				-																				
				-																				
				-																				
				-																				
				-																				
				-																				

Comments: Dissolved metals were field filtered.

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received by (Signed)	Date	Time
1.		4/25/14	1600	1.		
2.				2.		
3.				3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:	No	Shipped: No.:	2
Method of Shipment:	FedEx	Airbill Number:	
Analytical Lab:	GCAL	Delivery Location:	Baton Rouge, LA
Lab Recipient:		Delivery Date/Time:	

1.) Chain of Custody Number = site name (e.g., SS-125) and then date (yymmdd) collected + custody number (e.g. **SS1251207201**)…July 20, 2012. (12 Characters Max; No Dashes)

2.) Sample Type Codes: **N** = Normal Sample, **TB** = Trip Blank (-e) Sample, **FD** = Field Duplicate (-a) Samples, **FR** = Field Replicate (-b) Samples, **EB** = Equipment Blank (-d) Samples, **MS** = Matrix Spike (-ms), **SD** = Matrix Spike Duplicate (-sd), **AB** = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-01 on 07/20/12 = 1, if sampled again on 07/20/12 = 2, etc.)

4.) Matrix Codes: **GS** = Soil Gas, **WG** = Ground Water , **WS** = Surface Water **SO** = Soil, **SE** = Sediment, **SL** = Sludge, **SS**= Suface Soil Samples, **WQ** = Aqueous Blank Samples (trip, equipment, ambient, etc.), **SQ**= Soil Blanks

5.) Sample Method Codes: **CS** = Composite Sample, **E2** = Elec. Submersible Pump (1982 +), **G** = Grab, **H** = Hollow Stem Auger, **PP** = Peristaltic Pump, **W** = Swab or Wipe. (See handout for more methods)

6.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

7.) Quality assurance samples are assigned by date and the number (ddmmyynn) of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or ambient blank collected on July 20, 2012 in association with samples on the COC will be designated **20071201** in the Blank Lot Control Number field).

NOTES: Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-e. ERPIMS LOCID for TB, EB and AB are designated as FIELDQC samples.

TRINITY
ANALYSIS & DEVELOPMENT CORP
Environmental & Engineering Services

Page \ of \

Project Number A012-107

Chain of Custody Number (1): 14043503

Chain of Custody and Analytical Request

Project Name / Site Name: Melrose Semi 2014 Sping

Facility: Melrose Air Force Range

Client Name: USACE ABQ

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart (251) 709-6509

Turn Around Time

- 24 Hour ☐
- 7 Day ☐
- Standard X
- Other ☐

Sample Analysis Requested (6)

Quality Assurance Samples (7)

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	Sample Code (2)	Sample Number (3)	Sample Matrix (4)	Sample Method (5)	Number of Containers	Chromium (VI) 218.6								Sampler's Initials	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID (Alphabetical Notation)
M114MW004		25043014	0935		N	1	WG		1	X												C
MW03-24		25 04 3014	1100		N	1	WG		1	X												C
MA02MW001D		25 04 2014	1252		N	1	WG		1	X												C
MA02MW001D-02		25 04 2014	1252		FD	1	WG		1	X												C
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

Comments:

Custody Transfers Prior to Receipt by Laboratory

	Relinquished by (Signed)	Date	Time	Received by (Signed)	Date	Time
1.	[signature]	4/25/14	1600	1.		
2.				2.		
3.				3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:	N/A	Shipped: No.:	1
Method of Shipment:	FedEx	Airbill Number:	
Analytical Lab:	ALS Environmental	Delivery Location:	Rochester, NY
Lab Recipient:		Delivery Date/Time:	

1.) Chain of Custody Number = site name (e.g., SS-125) and then date (yymmdd) collected + custody number (e.g. **SS1251207201**)....July 20, 2012. (12 Characters Max; No Dashes)

2.) Sample Type Codes: N = Normal Sample, **TB** = Trip Blank (-c) Sample, **FD** = Field Duplicate (-a) Samples, **FR** = Field Replicate (-b) Samples, **EB** = Equipment Blank (-d) Samples, **MS** = Matrix Spike (-ms), **SD** = Matrix Spike Duplicate (-sd), **AB** = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-01 on 07/20/12 = 1, if sampled again on 07/20/12 = 2, etc.)

4.) Matrix Codes: **GS** = Soil Gas, **WG** = Ground Water , **WS** = Surface Water **SO** = Soil, **SE** = Sediment, **SL** = Sludge, **SS**= Suface Soil Samples, **WQ** = Aqueous Blank Samples (trip, equipment, ambient, etc.), **SQ**= Soil Blanks

5.) Sample Method Codes: **CS** = Composite Sample, **E2** = Elec. Submersible Pump (1982 +), **G** = Grab, **H** = Hollow Stem Auger, **PP** = Peristaltic Pump, **W** = Swab or Wipe. (See handout for more methods)

6.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

7.) Quality assurance samples are assigned by date and the number (ddmmyyxx) of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or ambient blank collected on July 20, 2012 in association with samples on the COC will be designated **20071201** in the Blank Lot Control Number field)

NOTES: Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c. ERPIMS LOCID for TB, EB and AB are designated as 'EB1,TBQC' samples.

TRINITY
ANALYSIS & DEVELOPMENT CORP
Environmental & Engineering Services

Page 1 of 1

Project Number A012-107

Chain of Custody Number (1): 14042502

Chain of Custody and Analytical Request

Project Name / Site Name: Melrose Semi 2014 Sping

Facility: Melrose Air Force Range

Client Name: USACE ABQ

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart (251) 709-6509

Turn Around Time

- 24 Hour ☐
- 7 Day ☐
- Standard X
- Other ☐

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	Sample Code (2)	Sample Number (3)	Sample Matrix (4)	Sample Method (5)	Number of Containers	Chromium (VI) 218.6								Sampler's Initials	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID (Alphabetical Notation)
M114MW004		25042014	0935		N	1	WG		1	X												C
MW8-24		25042014	1100		N	1	WG		1	X												C
MA023MW001D		25042014	1252		N	1	WG		1	X												C
MA023MW001D-00		25042014	1252		FD	1	WG		1	X												C
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

Comments:

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received by (Signed)	Date	Time
1.	[signature]	4/25/14	1600	1.		
2.				2.		
3.				3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: WG
Method of Shipment: FedEx
Analytical Lab: ALS Environmental
Lab Recipient:

Shipped: No.: 1
Airbill Number:
Delivery Location: Rochester, NY
Delivery Date/Time:

1.) Chain of Custody Number = site name (e.g., SS-125) and then date (yymmdd) collected + custody number (e.g. SS1251207201)... July 20, 2012. (12 Characters Max: No Dashes)

2.) Sample Type Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike (-ms), SD = Matrix Spike Duplicate (-sd), AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-01 on 07/20/12 = 1, if sampled again on 07/20/12 = 2, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Ground Water , WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS= Suface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ= Soil Blanks

5.) Sample Method Codes: CS = Composite Sample, E2 = Elec. Submersible Pump (1982 +), G = Grab, H = Hollow Stem Auger, PP = Peristaltic Pump, W = Swab or Wipe. (See handout for more methods)

6.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

7.) Quality assurance samples are assigned by date and the number (Alphabetical) of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or ambient blank collected on July 20, 2012 in association with samples on the COC will be designated **20071201** in the Blank Lot Control Number field)

NOTES: Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c. ERPIMS LOCID for TB, EB and AB are designated as FB1,DQC samples.

TRINITY ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Page 1 of 1

Project Number A012-108

Chain of Custody Number (1): 14042902

Project Name / Site Name: Melrose Annual 2014

Facility: Melrose Air Force Range

Client Name: USACE ABQ

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart (251) 709-6509

Turn Around Time

- 24 Hour ☐
- 7 Day ☐
- Standard X
- Other ☐

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	Sample Code (2)	Sample Number (3)	Sample Matrix (4)	Sample Method (5)	Number of Containers	Chromium (VI) 218.6								Sampler's Initials	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID (Alphabetical Notation)
MWQ-19		29042014	0841		N	1	WG		1	X												B
MWQ-18		29042014	0931		N	1	WG		1	X												B
MWQ-21		29042014	1241		N	1	WG		1	X												B
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

Comments:

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received by (Signed)	Date	Time
1.	[signature]	4-30-14	1530			
2.						
3.						

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:	No	Shipped: No.:	1
Method of Shipment:	Fedex	Airbill Number:	
Analytical Lab:	ALS	Delivery Location:	Rochester, NY
Lab Recipient:		Delivery Date/Time:	

1.) Chain of Custody Number = site name (e.g., SS-125) and then date (yymmdd) collected + custody number (e.g. **SS125120720l**)... July 20, 2012. (12 Characters Max: No Dashes)

2.) Sample Type Codes: N = Normal Sample, TB = Trip Blank (-t) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike (-ms), SD = Matrix Spike Duplicate (-sd), AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-01 on 07/20/12 = 1, if sampled again on 07/20/12 = 2, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Ground Water, WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS= Suface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ= Soil Blanks

5.) Sample Method Codes: CS = Composite Sample, E2 = Elec. Submersible Pump (1982 +), G = Grab, H = Hollow Stem Auger, PP = Peristaltic Pump, W = Swab or Wipe. (See handout for more methods)

6.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

7.) Quality assurance samples are assigned by date and the number (ddmmyynn) of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or ambient blank collected on July 20, 2012 in association with samples on the COC will be designated **20071201** in the Blank Lot Control Number field).

NOTES: Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c. ERPIMS LOCID for TB, EB and AB are designated as FIELDQC samples.

TRINITY
ANALYSIS & DEVELOPMENT CORP
Environmental & Engineering Services

Chain of Custody and Analytical Request

Project Number: A012-108

Chain of Custody Number (1): 1404290 1

Project Name / Site Name: Melrose 2014 Annual

Facility: Melrose Air Force Range

Client Name: USACE ABQ

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart (251)709-6509

Turn Around Time

- 24 Hour ☐
- 7 Day ☐
- Standard X
- Other ☐

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	Sample Code (2)	Sample Number (3)	Sample Matrix (4)	Sample Method (5)	Number of Containers	Total and Dissovled Metals 6020A	Cyanide 9012A	Nitrate, Nitrite 300.0	Chloride, Sulfate 300.0	Perchlorate 6860	Alkalinity 2320B	TDS 2540C	Thallium Total and Dissolved 6020A	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID (Alphabetical Notation)
MWQ-19		29042014	0841		N	1	WG		5	X	X	X	X	X	X	X	X				A
MWQ-18		29042014	0931		N	1	WG		5	X	X	X	X	X	X	X	X				A
MWQ-21		29042014	1241		N	1	WG		5	X	X	X	X	X	X	X	X				A
				-																	
				-																	
				-																	
				-																	
				-																	
				-																	
				-																	
				-																	
				-																	
				-																	
				-																	
				-																	
				-																	
				-																	
				-																	
				-																	

Quality Assurance Samples (7)

Dissolved metals were field filtered.

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (Signed)	Date	Time
1.	4/29/14	1530	1.		
2.			2.		
3.			3.		

Delivered Directly to Lab: No
Method of Shipment: Fedex
Analytical Lab: CCAL
Lab Recipient:

Shipped: No.: 1
Airbill Number:
Delivery Location: Baton Rouge, LA
Delivery Date/Time:

1.) Chain of Custody Number = site name (e.g., SS-125) and then date (yymmdd) collected – custody number (e.g. SS125120720**1**)...July 20, 2012. (12 Characters Max; No Dashes)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-01 on 07/20/12 = 1, if sampled again on 07/20/12 = 2, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Ground Water , WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS= Suface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ= Soil Blanks
5.) Sample Method Codes: CS = Composite Sample, E2 = Elec. Submersible Pump (1982 +), G = Grab, H = Hollow Stem Auger, PP = Peristaltic Pump, W = Swab or Wipe. (See handout for more methods)
6.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

NOTES: Trip Blanks shall correspond to the first well sampled with VOCs. for example: ST069-MW-08S-c. ERPIMS LOCID for TB, EB and AB are designated as FIELDQC samples.

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Project Number: A012-107

Chain of Custody Number (1): 14042403

Project Name / Site Name: Melrose Semi 2014 Sping

Facility: Melrose Air Force Range

Client Name: USACE ABQ

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart (251) 709-6509

Turn Around Time

- 24 Hour ☐
- 7 Day ☐
- Standard X
- Other ☐

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	Sample Code (2)	Sample Number (3)	Sample Matrix (4)	Sample Method (5)	Number of Containers	Chromium (VI) 218.6								Sample's Initials	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID (Alphabetical Notation)
MA01MW004		24-04-2014	1010		N	1	WG		1	X												B
M114MW003		24042014	1200		N	1	WG		1	X												B
M114MW002		24-04-2014	1303		N	1	WG		1	X												B
M114MW001		24042014	1430		N	1	WG		1	X												
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

Comments:

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (Signed)	Date	Time
1.	4/24/14	1700	1.		
2.			2.		
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:	Fedex	Shipped. No.:	1
Method of Shipment:		Airbill Number:	
Analytical Lab:	ALS Environmental	Delivery Location:	Rochester, NY
Lab Recipient:		Delivery Date/Time:	

1.) Chain of Custody Number = site name (e.g., SS-125) and then date (yymmdd) collected + custody number (e.g. **SS1251207201**).. July 20, 2012. (12 Characters Max; No Dashes)

2.) Sample Type Codes: N = Normal Sample, TB = Trip Blank (-t) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike (-ms), SD = Matrix Spike Duplicate (-sd), AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-01 on 07/20/12 = 1, if sampled again on 07/20/12 = 2, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Ground Water , WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS= Suface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ= Soil Blanks

5.) Sample Method Codes: CS = Composite Sample, E2 = Elec. Submersible Pump (1982 +), G = Grab, H = Hollow Stem Auger, PP = Peristaltic Pump, W = Swab or Wipe. (See handout for more methods)

6.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

7.) Quality assurance samples are assigned by date and the number (ddmmyyxxx) of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or ambient blank collected on July 20, 2012 in association with samples on the COC will be designated **20071201** in the Blank Lot Control Number field).

NOTES: Trip Blanks shall correspond to the first well sampled with VOCs. for example: ST069-MW-08S-c. ERPIMS LOCID for TB, EB and AB are designated as FTEL DQC samples.

TRINITY ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Project Number: A012-107

Chain of Custody Number (1): 14042401

Project Name / Site Name: Melrose Semi Spring 2014

Facility: Melrose Air Force Range

Client Name: USACE ABQ

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart 251-709-6509

Turn Around Time

24 Hour ☐
7 Day ☐
Standard X
Other ☐

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	Sample Code (2)	Sample Number (1)	Sample Matrix (4)	Sample Method (5)	Number of Containers	VOCs 8260B	Explosives 8330	Metals (Total & Diss.) 6020A	Cyanide 9012A	Mercury 7470A	Nitrate, Nitrite 300.0	Chloride, Sulfate 300.0	Perchlorate 6860	Alkalinity 2320B	TDS 2540C	Thallium (Total and Dissolved) 6020A	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID (Alphabetical Notation)
MA01MW004		24042014	1010		N	1	WG		10	X	X	X	X	X	X	X	X	X	X	X				A
M114MW003		24042014	1200		N	1	WG		10	X	X	X	X	X	X	X	X	X	X	X				A
TB-3		24042014	1010		TB	1	WQ		3	X														A
M114MW002		24042014	1308		N	1	WG		10	X	X	X	X	X	X	X	X	X	X	X				B
M114MW001		24042014	1430		N	1	WG		10	X	X	X	X	X	X	X	X	X	X	X				B
TB-4		24042014	1308		TB	1	WQ		3	X														B
				-																				
				-																				
				-																				
				-																				
				-																				
				-																				
				-																				
				-																				
				-																				
				-																				
				-																				

Comments: Dissolved metals were field filtered.

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received by (Signed)	Date	Time
1.		4/24/14	1705	1.		
2.				2.		
3.				3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:	No	Shipped: No.:	2
Method of Shipment:	Fedex	Airbill Number:	
Analytical Lab:	GCAL	Delivery Location:	Baton Rouge, LA
Lab Recipient:		Delivery Date/Time:	

1.) Chain of Custody Number = site name (e.g., SS-125) and then date (yymmdd) collected + custody number (e.g. **SS1251207201**)... July 20, 2012. (12 Characters Max; No Dashes)

2.) Sample Type Codes: **N** = Normal Sample, **TB** = Trip Blank (-e) Sample, **FD** = Field Duplicate (-n) Samples, **FR** = Field Replicate (-b) Samples, **EB** = Equipment Blank (-d) Samples, **MS** = Matrix Spike (-ms), **SD** = Matrix Spike Duplicate (-sd), **AB** = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-01 on 07/20/12 = 1, if sampled again on 07/20/12 = 2, etc.)

4.) Matrix Codes: **GS** = Soil Gas, **WG** = Ground Water , **WS** = Surface Water **SO** = Soil, **SE** = Sediment, **SL** = Sludge, **SS**= Surface Soil Samples, **WQ** = Aqueous Blank Samples (trip, equipment, ambient, etc.), **SQ**= Soil Blanks

5.) Sample Method Codes: **CS** = Compsite Sample, **E2** = Elec. Submersible Pump (1982 +), **G** = Grab, **H** = Hollow Stem Auger, **PP** = Peristaltic Pump, **W** = Swab or Wipe. (See handout for more methods)

6.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

7.) Quality assurance samples are assigned by date and the number (ddmmyynn) of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or ambient blank collected on July 20, 2012 in association with samples on the COC will be designated **20071201** in the Blank Lot Control Number field).

NOTES: Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c. ERPIMS LOCID for TB, EB and AB are designated as FIELDQC samples.

TRINITY ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Page 1 of 1

Project Number: A012-107

Chain of Custody Number (1): 14042402

Project Name / Site Name: Melrose Semi Spring 2014

Facility: Melrose Air Force Range

Client Name: USACE ABQ

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart 251-709-6509

Turn Around Time

- 24 Hour ☐
- 7 Day ☐
- Standard X
- Other ☐

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	Sample Code (2)	Sample Number (1)	Sample Matrix (4)	Sample Method (5)	Number of Containers	VOCs 8260B	Explosives 8330	Metals (Total & Diss.) 6020A	Cyanide 9012A	Mercury 7470A	Nitrate, Nitrite 300.0	Chloride, Sulfate 300.0	Perchlorate 6860	Alkalinity 2320B	TDS 2540C	Thallium (Total and Dissolved) 6020A	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID (Alphabetical Notation)
M114MW002		24042014	1308		N	1	WG		12	X	X	X	X	X	X	X	X	X	X	X				C
TB-5		24042014	1308		TB	1	WQ		2	X														
				-																				
				-																				
				-																				
				-																				
				-																				
				-																				
				-																				
				-																				
				-																				
				-																				
				-																				
				-																				
				-																				
				-																				
				-																				

Comments: Dissolved metals were field filtered.

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (Signed)	Date	Time
1.	4/24/14	1700	1.		
2.			2.		
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:	No	Shipped: No.:	1
Method of Shipment:	Fedex	Airbill Number:	
Analytical Lab:	Accutest	Delivery Location:	Orlando, FL
Lab Recipient:		Delivery Date/Time:	

1.) Chain of Custody Number = site name (e.g., SS-125) and then date (yymmdd) collected + custody number (e.g. **SS1251207201**)....July 20, 2012. (12 Characters Max; No Dashes)

2.) Sample Type Codes: **N** = Normal Sample, **TB** = Trip Blank (-e) Sample, **FD** = Field Duplicate (-a) Samples, **FR** = Field Replicate (-b) Samples, **EB** = Equipment Blank (-d) Samples, **MS** = Matrix Spike (-ms), **SD** = Matrix Spike Duplicate (-sd), **AB** = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-01 on 07/20/12 = 1, if sampled again on 07/20/12 = 2, etc.)

4.) Matrix Codes: **GS** = Soil Gas, **WG** = Ground Water , **WS** = Surface Water **SO** = Soil, **SE** = Sediment, **SL** = Sludge, **SS**= Suface Soil Samples, **WQ** = Aqueous Blank Samples (trip, equipment, ambient, etc.), **SQ**= Soil Blanks

5.) Sample Method Codes: **CS** = Compsite Sample, **E2** = Elec. Submersible Pump (1982 +), **G** = Grab, **H** = Hollow Stem Auger, **PP** = Peristaltic Pump, **W** = Swab or Wipe. (See handout for more methods)

6.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

7.) Quality assurance samples are assigned by date and the number (ddmmsysnu) of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or ambient blank collected on July 20, 2012 in association with samples on the COC will be designated **20071201** in the Blank Lot Control Number field).

NOTES: Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c. ERPIMS LOCID for TB, EB and AB are designated as FIELDQC samples.

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Project Number: A012-108

Chain of Custody Number (1): 14050101

Project Name / Site Name: Melrose 2014 Annual

Facility: Melrose Air Force Range

Client Name: USACE ABQ

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart (251)709-6509

Turn Around Time

24 Hour	☐
7 Day	☐
Standard	X
Other	☐

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	Sample Code (2)	Sample Number (3)	Sample Matrix (4)	Sample Method (5)	Number of Containers	pH	Flashpoint	TX-1005					Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID (Alphabetical Notation)
										Quality Assurance Samples (7)										
IDW-01		01052014	1140		N	1	WG		4	X	X	X								A
				-																
				-																
				-																
				-																
				-																
				-																
				-																
				-																
				-																
				-																
				-																
				-																

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received by (Signed)	Date	Time
1.		5-1-14	1400	1.		
2.				2.		
3.				3.		

Delivered Directly to Lab:	No	Shipped: No.:	1
Method of Shipment:	Fedex	Airbill Number:	
Analytical Lab:	GCAL	Delivery Location:	Baton Rouge, LA
Lab Recipient:		Delivery Date/Time:	

1.) Chain of Custody Number = site name (e.g., SS-125) and then date (yymmdd) collected + custody number (e.g. **SS1251207201**)...July 20, 2012. (12 Characters Max; No Dashes)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-01 on 07/20/12 = 1, if sampled again on 07/20/12 = 2, etc.)

4.) Matrix Codes: **GS** = Soil Gas, **WG** = Ground Water , **WS** = Surface Water **SO** = Soil, **SE** = Sediment, **SL** = Sludge, **SS**= Suface Soil Samples, **WQ** = Aqueous Blank Samples (trip, equipment, ambient, etc.), **SQ**= Soil Blanks

5.) Sample Method Codes: **CS** = Compsite Sample, **E2** = Elec. Submersible Pump (1982 +), **G** = Grab, **H** = Hollow Stem Auger, **PP** = Peristaltic Pump, **W** = Swab or Wipe. (See handout for more methods)

6.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

NOTES: Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-e. ERPIMS LOCID for TB, EB and AB are designated as FIELDQC samples.

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Project Number: A012-108

Chain of Custody Number (1): 14050102

Project Name / Site Name: Melrose Annual 2014	
Facility: Melrose Air Force Range	
Client Name: USACE ABQ	
Project Manager: Jonathan Kramer	
Collected by: Benjamin Stewart (251) 709-6509	

Turn Around Time

24 Hour	☐
7 Day	☐
Standard	X
Other	☐

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	Sample Code (2)	Sample Number (3)	Sample Matrix (4)	Sample Method (5)	Number of Containers	Chromium (VI) 218.6								Sampler's Initials	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID (Alphabetical Notation)
MW2-14		01052014	0751		N	1	WG		1	X												B
MW2-20		01052014	1016		N	1	WG		1	X												B
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

Comments:

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received by (Signed)	Date	Time
1.		5/11/14	1400	1.		
2.				2.		
3.				3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:	NP	Shipped: No.:	1
Method of Shipment:	Fedex	Airbill Number:	
Analytical Lab:	ALS	Delivery Location:	Rochester, NY
Lab Recipient:		Delivery Date/Time:	

1.) Chain of Custody Number = site name (e.g., SS-125) and then date (yymmdd) collected + custody number (e.g. **SS1251207201**)...July 20, 2012. (12 Characters Max; No Dashes)

2.) Sample Type Codes: **N** = Normal Sample, **TB** = Trip Blank (-c) Sample, **FD** = Field Duplicate (-a) Samples, **FR** = Field Replicate (-b) Samples, **EB** = Equipment Blank (-d) Samples, **MS** = Matrix Spike (-ms), **SD** = Matrix Spike Duplicate (-sd), **AB** = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-01 on 07/20/12 = 1, if sampled again on 07/20/12 = 2, etc.)

4.) Matrix Codes: **GS** = Soil Gas, **WG** = Ground Water , **WS** = Surface Water **SO** = Soil, **SE** = Sediment, **SL** = Sludge, **SS**= Suface Soil Samples, **WQ** = Aqueous Blank Samples (trip, equipment, ambient, etc.), **SQ**= Soil Blanks

5.) Sample Method Codes: **CS** = Compsite Sample, **E2** = Elec. Submersible Pump (1982 +), **G** = Grab, **H** = Hollow Stem Auger, **PP** = Peristaltic Pump, **W** = Swab or Wipe. (See handout for more methods)

6.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

7.) Quality assurance samples are assigned by date and the number (ddmmyynn) of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or ambient blank collected on July 20, 2012 in association with samples on the COC will be designated **20071201** in the Blank Lot Control Number field).

NOTES: Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c. ERPIMS LOCID for TB, EB and AB are designated as FIELDQC samples.

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Page 1 of 1

Project Number: A012-108

Chain of Custody Number (1): 14050103

Project Name / Site Name: Melrose 2014 Annual

Facility: Melrose Air Force Range

Client Name: USACE ABQ

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart (251)709-6509

Turn Around Time

24 Hour ☐

7 Day ☐

Standard X

Other ☐

Quality Assurance Samples (7)

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	Sample Code (2)	Sample Number (3)	Sample Matrix (4)	Sample Method (5)	Number of Containers	Total and Dissovled Metals 6020A	Cyanide 9012A	Nitrate, Nitrite 300.0	Chloride, Sulfate 300.0	Perchlorate 6860	Alkalinity 2320B	TDS 2540C	Thallium Total and Dissolved 6020A	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID (Alphabetical Notation)
MW2-14		01052014	0751		N	1	WG		5	X	X	X	X	X	X	X	X				C
MW2-20		01052014	1016		N	1	WG		5	X	X	X	X	X	X	X	X				C
				-																	
				-																	
				-																	
				-																	
				-																	
				-																	
				-																	
				-																	
				-																	
				-																	
				-																	

Dissolved metals were field filtered.

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received by (Signed)	Date	Time
1.		5/11/14	1400	1.		
2.				2.		
3.				3.		

Delivered Directly to Lab: No

Method of Shipment: Fedex

Analytical Lab: GCAL

Lab Recipient:

Shipped: No.: 1

Airbill Number:

Delivery Location: Baton Rouge, LA

Delivery Date/Time:

1.) Chain of Custody Number = site name (e.g., SS-125) and then date (yymmdd) collected + custody number (e.g. **SS1251207201**)…July 20, 2012. (12 Characters Max; No Dashes)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-01 on 07/20/12 = 1, if sampled again on 07/20/12 = 2, etc.)

4.) Matrix Codes: **GS** = Soil Gas, **WG** = Ground Water , **WS** = Surface Water **SO** = Soil, **SE** = Sediment, **SL** = Sludge, **SS**= Suface Soil Samples, **WQ** = Aqueous Blank Samples (trip, equipment, ambient, etc.), **SQ**= Soil Blanks

5.) Sample Method Codes: **CS** = Compsite Sample, **E2** = Elec. Submersible Pump (1982 +), **G** = Grab, **H** = Hollow Stem Auger, **PP** = Peristaltic Pump, **W** = Swab or Wipe. (See handout for more methods)

6.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

NOTES: Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c. ERPIMS LOCID for TB, EB and AB are designated as FIELDQC samples.

TRINITY ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Page 1 of 1

Project Number: A02-68

Chain of Custody Number (1): 14050104

Chain of Custody and Analytical Request

Project Name / Site Name: Melrose 2014 Annual
Facility: Melrose AFR
Client Name: USACE ABQ
Project Manager: Jonathan Kramer
Collected by: Benjamin Stewart 2517096509

Turn Around Time
- 24 Hour ☐
- 7 Day ☐
- Standard ☒
- Other ☐

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	Sample Code (2)	Sample Number (3)	Sample Matrix (4)	Sample Method (5)	Number of Containers	Sample Analysis Requested (6): Total/Diss Metals 6020A	Cyanide 9012A	Nitrate Nitrite Chloride, Sulfate 300.0	Perchlorate 6860	Alkalinity 2320B	TDS 2540C	Thallium Total/Diss 6020A	Chromium (VI) 218.6	Sampler's Initials	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID (Alphabetical Notation)
MWQ-20		01052014	1016		N	1	WG		7	X	X	X	X	X	X	X	X					D
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

Comments: Dissolved metals field filtered

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received by (Signed)	Date	Time
1.		5/1/14	1400			
2.						
3.						

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: No
Method of Shipment: Fedex
Analytical Lab: Accutest
Lab Recipient:
Shipped: No.: 1
Airbill Number:
Delivery Location: Orlando, FL
Delivery Date/Time:

1.) Chain of Custody Number = site name (e.g., SS-125) and then date (yymmdd) collected + custody number (e.g. **SS1251207201**)…July 20, 2012. (12 Characters Max; No Dashes)
2.) Sample Type Codes: **N** = Normal Sample, **TB** = Trip Blank (-c) Sample, **FD** = Field Duplicate (-a) Samples, **FR** = Field Replicate (-b) Samples, **EB** = Equipment Blank (-d) Samples, **MS** = Matrix Spike (-ms), **SD** = Matrix Spike Duplicate (-sd), **AB** = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-01 on 07/20/12 = 1, if sampled again on 07/20/12 = 2, etc.)
4.) Matrix Codes: **GS** = Soil Gas, **WG** = Ground Water , **WS** = Surface Water **SO** = Soil, **SE** = Sediment, **SL** = Sludge, **SS**= Suface Soil Samples, **WQ** = Aqueous Blank Samples (trip, equipment, ambient, etc.), **SQ**= Soil Blanks
5.) Sample Method Codes: **CS** = Compsite Sample, **E2** = Elec. Submersible Pump (1982 +), **G** = Grab, **H** = Hollow Stem Auger, **PP** = Peristaltic Pump, **W** = Swab or Wipe. (See handout for more methods)
6.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
7.) Quality assurance samples are assigned by date and the number (ddmmyynn) of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or ambient blank collected on July 20, 2012 in association with samples on the COC will be designated **20071201** in the Blank Lot Control Number field).

NOTES: Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c. ERPIMS LOCID for TB, EB and AB are designated as FIELDQC samples.

TRINITY
ANALYSIS & DEVELOPMENT CORP
Environmental & Engineering Services

Chain of Custody and Analytical Request

Page 1 of 1

Project Number: A012-108

Chain of Custody Number (1): 1404301

Project Name / Site Name: Melrose 2014 Annual

Facility: Melrose Air Force Range

Client Name: USACE ABQ

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart (251)709-6509

Turn Around Time

24 Hour ☐
7 Day ☐
Standard X
Other ☐

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	Sample Code (2)	Sample Number (3)	Sample Matrix (4)	Sample Method (5)	Number of Containers	Total and Dissovled Metals 6020A	Cyanide 9012A	Nitrate, Nitrite 300.0	Chloride, Sulfate 300.0	Perchlorate 6860	Alkalinity 2320B	TDS 2540C	Thallium Total and Dissolved 6020A	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID (Alphabetical Notation)
MWQ-22		30 04 2014	0841		N	1	WG		5	X	X	X	X	X	X	X	X				A
MWQ-22-a		30 04 2014	0841		FD	1	WG		5	X	X	X	X	X	X	X	X				A
MWQ-2		30 04 2014	1046		N	1	WG		5	X	X	X	X	X	X	X	X				B
MWQ-2-ms		30 04 2014	1046		MS	1	WG		5	X	X	X	X	X	X	X	X				B
MWQ-2-sd		30 04 2014	1046		SD	1	WG		5	X	X	X	X	X	X	X	X				B
				-																	
				-																	
				-																	
				-																	
				-																	
				-																	
				-																	
				-																	
				-																	
				-																	
				-																	
				-																	
				-																	

Quality Assurance Samples (7)

Dissolved metals were field filtered.

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received by (Signed)	Date	Time
1.		4/3/14	1400			
2.						
3.						

Delivered Directly to Lab: No
Method of Shipment: Fedex
Analytical Lab: TCAL
Lab Recipient:

Shipped: No.: 2
Airbill Number:
Delivery Location: Baton Rouge, LA
Delivery Date/Time:

1.) Chain of Custody Number = site name (e.g., SS-125) and then date (yymmdd) collected + custody number (e.g. SS1251207201)...July 20, 2012. (12 Characters Max; No Dashes)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-01 on 07/20/12 = 1, if sampled again on 07/20/12 = 2, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Ground Water, WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS= Suface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ= Soil Blanks
5.) Sample Method Codes: CS = Composite Sample, E2 = Elec. Submersible Pump (1982 +), G = Grab, H = Hollow Stem Auger, FP = Peristaltic Pump, W = Swab or Wipe. (See handout for more methods)
6.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

NOTES: Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c. ERPIMS LOCID for TB, EB and AB are designated as HFT DQC samples.

TRINITY ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Project Number: A012-108

Chain of Custody Number (1): 14043002

Project Name / Site Name: Melrose Annual 2014

Facility: Melrose Air Force Range

Client Name: USACE ABQ

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart (251) 709-6509

Turn Around Time

- 24 Hour ☐
- 7 Day ☐
- Standard X
- Other ☐

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	Sample Code (2)	Sample Number (3)	Sample Matrix (4)	Sample Method (5)	Sample Analysis Requested (6): Number of Containers	Chromium (VI) 218.6	Sampler's Initials	Quality Assurance Samples (7): Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID (Alphabetical Notation)
MWQ-22		30 04 2014	0841		N	1	WG		1	X					C
MWQ-22-ea		30 04 2014	0841		FD	1	WG		1	X					C
MWQ-2		30 04 2014	1046		N	1	WG		1	X					C
MWQ-2-MS		30042014	1046		MS	1	WG		1	X					C
MWQ-2-SD		30042014	1046		SD	1	WG		1	X					C

Comments:

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received by (Signed)	Date	Time
1.		4/30/14	1400	1.		
2.				2.		
3.				3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:	No
Method of Shipment:	Fedex
Analytical Lab:	ALS
Lab Recipient:	
Shipped: No.:	1
Airbill Number:	
Delivery Location:	Rochester, NY
Delivery Date/Time:	

1.) Chain of Custody Number = site name (e.g., SS-125) and then date (yymmdd) collected + custody number (e.g. SS125120720**1**). July 20, 2012. (12 Characters Max: No Dashes)

2.) Sample Type Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samaples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike (-ms), SD = Matrix Spike Duplicate (-sd), AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-01 on 07/20/12 = 1, if sampled again on 07/20/12 = 2, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Ground Water , WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS= Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ = Soil Blanks

5.) Sample Method Codes: CS = Composite Sample, E2 = Elec. Submersible Pump (1982 +), G = Grab, H = Hollow Stem Auger, PP = Peristaltic Pump, W = Swab or Wipe. (See handout for more methods)

6.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

7.) Quality assurance samples are assigned by date and the number (ddnnssyyn) of the associated QC sample (01, 02, etc) (E.g., The first equipment blank, trip blank, or ambient blank collected on July 20, 2012 in association with samples on the COC will be designated 20071201 in the Blank Lot Control Number field).

NOTES: Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c. ERPIMS LOCID for TB, EB and AB are designated as FIELDQC samples.

TRINITY ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Page 1 of 1

Project Number: A012-108

Chain of Custody Number (1): 14043005

Project Name / Site Name: Melrose Annual 2014

Facility: Melrose Air Force Range

Client Name: USACE ABQ

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart (251) 709-6509

Turn Around Time

24 Hour ☐
7 Day ☐
Standard X
Other ☐

Sample Analysis Requested (6)

Quality Assurance Samples (7)

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	Sample Code (2)	Sample Number (3)	Sample Matrix (4)	Sample Method (5)	Number of Containers	Chromium (VI) 218.6									Sampler's Initials	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID (Alphabetical Notation)
MWQ-22		30 04 2014	0841		N	1	WG		1	X													C
MWQ-22-ea		30 04 2014	0841		FD	1	WG		1	X													C
MWQ-2		30 04 2014	1046		N	1	WG		1	X													C
MWQ-2-MS		30 04 2014	1046		MS	1	WG		1	X													C
MWQ-2-SD		30 04 2014	1046		SD	1	WG		1	X													C
				-																			
				-																			
				-																			
				-																			
				-																			
				-																			
				-																			
				-																			
				-																			
				-																			
				-																			
				-																			
				-																			

Comments:

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received by (Signed)	Date	Time
1.		4/30/14	1400			
2.						
3.						

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: No
Method of Shipment: FedEx
Analytical Lab: ALS
Lab Recipient:

Shipped: No.: 1
Airbill Number:
Delivery Location: Rochester, NY
Delivery Date/Time:

1.) Chain of Custody Number = site name (e.g., SS-125) and then date (yymmdd) collected + custody number (e.g. SS1251207201)... July 20, 2012. (12 Characters Max; No Dashes)
2.) Sample Type Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike (-ms), SD = Matrix Spike Duplicate (-sd), AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day (e.g. Groundwater sample collected from MW-01 on 07/20/12 = 1, if sampled again on 07/20/12 = 2, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Ground Water , WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS= Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ= Soil Blanks
5.) Sample Method Codes: CS = Composite Sample, E2 = Elec. Submersible Pump (1982 +), G = Grab, H = Hollow Stem Auger, PP = Peristaltic Pump, W = Swab or Wipe, (See handout for more methods)
6.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
7.) Quality assurance samples are assigned by date and the number (ddnnsssm) of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or ambient blank collected on July 20, 2012 in association with samples on the COC will be designated 20071201 in the Blank Lot Control Number field).

NOTES: Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c. ERPIMS LOCID for TB, EB and AB are designated as 'FIELDQA' samples.

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Project Number: A012-107

Chain of Custody Number (1): 14047301

Project Name / Site Name: Melrose Semi Spring 2014

Facility: Melrose Air Force Range

Client Name: USACE ABQ

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart 251-709-6509

Turn Around Time

24 Hour ☐
7 Day ☐
Standard X
Other ☐

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	Sample Code (2)	Sample Number (3)	Sample Matrix (4)	Sample Method (5)	Number of Containers	VOCs 8260B	Explosives 8330	Metals (Total & Diss.) 6020A	Cyanide 9012A	Mercury 7470A	Nitrate, Nitrite 300.0	Chloride, Sulfate 300.0	Perchlorate 6860	Alkalinity 2320B	TDS 2540C	Thallium (Total and Dissolved) 6020A	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID (Alphabetical Notation)
MA01MW007		23042014	1006		N	1	WG		10	X	X	X	X	X	X	X	X	X	X	X				A
MA01MW007-MS		23042014	1006		MS	1	WG		10	X	X	X	X	X	X	X	X	X	X	X				B
MA01MW007-SD		23042014	1006		SD	1	WG		10	X	X	X	X	X	X	X	X	X	X	X				B
TB-1		23042014	1006		TB	1	WQ		3	X														A
MA01MW003		23042014	1308		N	1	WG		10	X	X	X	X	X	X	X	X	X	X	X				A
MA01MW001		23042014	1416		N	1	WG		10	X	X	X	X	X	X	X	X	X	X	X				C
TB-2		23042014	1416		TB	1	WQ		3	X														C
				-																				
				-																				
				-																				
				-																				
				-																				
				-																				
				-																				
				-																				
				-																				
				-																				

Comments: Dissolved metals were field filtered.

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received by (Signed)	Date	Time
1.		4-23-14	1700	1.		
2.				2.		
3.				3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: NO
Method of Shipment: FedEx
Analytical Lab: GCAL
Lab Recipient:

Shipped: No.: 3
Airbill Number:
Delivery Location: Baton Rouge, LA
Delivery Date/Time:

1.) Chain of Custody Number = site name (e.g., SS-125) and then date (yymmdd) collected + custody number (e.g. **SS1251207201**)....July 20, 2012. (12 Characters Max; No Dashes)

2.) Sample Type Codes: **N** = Normal Sample, **TB** = Trip Blank (-c) Sample, **FD** = Field Duplicate (-a) Samples, **FR** = Field Replicate (-b) Samples, **EB** = Equipment Blank (-d) Samples, **MS** = Matrix Spike (-ms), **SD** = Matrix Spike Duplicate (-sd), **AB** = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-01 on 07/20/12 = 1, if sampled again on 07/20/12 = 2, etc.)

4.) Matrix Codes: **GS** = Soil Gas, **WG** = Ground Water , **WS** = Surface Water **SO** = Soil, **SE** = Sediment, **SL** = Sludge, **SS**= Suface Soil Samples, **WQ** = Aqueous Blank Samples (trip, equipment, ambient, etc.), **SQ**= Soil Blanks

5.) Sample Method Codes: **CS** = Composite Sample, **E2** = Elec. Submersible Pump (1982 +), **G** = Grab, **H** = Hollow Stem Auger, **PP** = Peristaltic Pump, **W** = Swab or Wipe. (See handout for more methods)

6.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

7.) Quality assurance samples are assigned by date and the number (ddmmyyna) of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or ambient blank collected on July 20, 2012 in association with samples on the COC will be designated **20071201** in the Blank Lot Control Number field).

NOTES: Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-e. ERPIMS LOCID for TB, EB and AB are designated as FIELDQC samples.

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Project Number: A012-107

Chain of Custody Number (1): 14042302

Project Name / Site Name: Melrose Semi 2014 Sping	Turn Around Time		
Facility: Melrose Air Force Range	24 Hour	☐	
Client Name: USACE ABQ	7 Day	☐	
Project Manager: Jonathan Kramer	Standard	X	
Collected by: Benjamin Stewart (251) 709-6509	Other	☐	

Sample Analysis Requested (6) / Quality Assurance Samples (7)

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	Sample Code (2)	Sample Number (3)	Sample Matrix (4)	Sample Method (5)	Number of Containers	Chromium (VI) 218.6								Sampler's Initials	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID (Alphabetical Notation)
MA01MW002		23 04 2014	1006		N	1	WG		1	X												D
MA01MW002-MS		23 04 2014	1006		MS	1	WG		1	X												D
MA01MW002-SD		23 04 2014	1006		SD	1	WG		1	X												D
MA01MW003		23 04 2014	1308		N	1	WG		1	X												D
MA01MW001		23 04 2014	1416		N	1	WG		1	X												D
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

Comments:

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (Signed)	Date	Time
1.	4-23-14	1700	1.		
2.			2.		
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:	No	Shipped: No.:	1
Method of Shipment:	FedEx	Airbill Number:	
Analytical Lab:	ALS	Delivery Location:	Rochester, NY
Lab Recipient:		Delivery Date/Time:	

1.) Chain of Custody Number = site name (e.g., SS-125) and then date (yymmdd) collected + custody number (e.g. SS1251207201)... July 20, 2012. (12 Characters Max; No Dashes)

2.) Sample Type Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike (-ms), SD = Matrix Spike Duplicate (-sd), AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-01 on 07/20/12 = 1, if sampled again on 07/20/12 = 2, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Ground Water, WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS= Suface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ= Soil Blanks

5.) Sample Method Codes: CS = Composite Sample, E2 = Elec. Submersible Pump (1982 +), G = Grab, H = Hollow Stem Auger, PP = Peristaltic Pump, W = Swab or Wipe. (See handout for more methods)

6.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

7.) Quality assurance samples are assigned by date and the number (ddmmyyyy) of the associated QC sample (01, 02, etc) (E.g., The first equipment blank, trip blank, or ambient blank collected on July 20, 2012 in association with samples on the COC will be designated 20071201 in the Blank Lot Control Number field)

NOTES: Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c. ERPIMS LOCID for TB, EB and AB are designated as FIELDQC samples.

TRINITY ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Project Number: A012-109

Chain of Custody Number (1): MAFR20141031002

Facility: Melrose Air Force Range

Project Name / Site Name: 2014 Semiannual

Client Name: Trinity (850) 613-6800

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart, Jonathan Kramer

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code [2]	Sample Number [3]	Sample Matrix [4]	Sample Analysis Requested [5]: Number of containers	Chromium (VI)										Quality Assurance Samples [6]: Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
MA01MW002		21 OCT 2014	1040		N	1	WG	1	X													D
MA01MW001		31 OCT 2014	1220		N	1	WG	1	X													D
MA01MW004		31 OCT 2014	1100		N	1	WG	1	X													D
MA01MW004-a		31 OCT 2014	1100		FD	1	WG	1	X													D
MA01MW003		31 OCT 2014	1220		N	1	WG	1	X													D

Comments

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1.		10/21/14	1500			
2.						
3.						

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: No — Shipped: No.: 1

Method of Shipment: FedEx — Airbill Number:

Analytical Lab: ALS — Delivery Location:

Lab Recipient: — Delivery Date/Time:

1.) Chain of Custody Number = site name (e.g., SS125) and then date (yyyymmdd) collected + custody number (e.g. SS125-20110902-01)…September 2, 2011.

2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/11 = 01, if sampled again on 10/10/11 = 02, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Ground Water , WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS= Suface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ= Soil Blanks

5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

6.) Quality assurance samples are assigned by date (ddmmyy) and the number of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or ambient blank collected on May 10, 2011 in association with samples on the COC will be designated 10051101 in the Blank Lot Control Number field).

7.) Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c

TRINITY ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Project Number: A012-109

Chain of Custody Number (1): MAFR20141021001

Facility: Melrose Air Force Range

Project Name / Site Name: 2014 Semiannual

Client Name: Trinity (850) 613-6800

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart, Jonathan Kramer

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code [2]	Sample Number [3]	Sample Matrix [4]	Sample Analysis Requested [5]: Number of containers	VOCs (8260B)	Explosives (8330)	Metals (Total & Diss) 6020A	Cyanide (9012A)	Mercury (7470A)	Nitrite, Nitrate (300.0)	Chloride, Sulfate (300.0)	Pechrlorate (6860)	Alkalinity (2320B)	TDS (2540C)	Quality Assurance Samples [6]: Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
MA01MW002		21OCT2014	1040		N		WG	10	X	X	X	X	X	X	X	X	X	X				A
MA01MW002-c		21OCT2014	1040		TB		WQ	3	X													A
MA01MW001		21OCT2014	1220		N		WG	10	X	X	X	X	X	X	X	X	X	X				B
MA01MW004		21OCT2014	1100		N		WG	10	X	X	X	X	X	X	X	X	X	X				B
MA01MW004-a		21OCT2014	1100		FD		WG	10	X	X	X	X	X	X	X	X	X	X				B
MA01MW004-c		21OCT2014	1100		TB		WQ	3	X													B
MA01MW003		21OCT2014	1226		N		WG	10	X	X	X	X	X	X	X	X	X	X				C
MA01MW003-c		21OCT2014	1226		TB		WQ	3	X													C

Comments: Diss metals field filtered

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1.	[signature]	10/21/14	1500			
2.						
3.						

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: No
Shipped: No.: 3
Method of Shipment: FedEx
Airbill Number:
Analytical Lab: GCAL
Delivery Location: Baton Rouge, LA
Lab Recipient:
Delivery Date/Time:

1.) Chain of Custody Number = site name (e.g., SS125) and then date (yyyymmdd) collected + custody number (e.g. SS125-20110902-01)…September 2, 2011.

2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/11 = 01, if sampled again on 10/10/11 = 02, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Ground Water , WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS= Suface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ= Soil Blanks

5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

6.) Quality assurance samples are assigned by date (ddmmyy) and the number of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or ambient blank collected on May 10, 2011 in association with samples on the COC will be designated 10051101 in the Blank Lot Control Number field).

7.) Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c

TRINITY ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Project Number: A012-109

Chain of Custody Number (1): MAFR2014102707

Facility: Melrose Air Force Range

Project Name / Site Name: 2014 Semiannual

Client Name: Trinity (850) 613-6800

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart, Jonathan Kramer

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code [2]	Sample Number [3]	Sample Matrix [4]	Sample Analysis Requested [5]: Number of containers	Chromium (VI) 218.6									Quality Assurance Samples [6]: Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
M114MW002		22 OCT 2014	0935		N	1	WG	1	X												C
M114MW003		22 OCT 2014	1110		N	1	WG	1	X												C
M114MW004		22 OCT 2014	1025		N	1	WG	1	X												C
M114MW001		22 OCT 2014	1235		N	1	WG	1	X												C

Comments

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1.	[signature]	10-22-14	1530			
2.						
3.						

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:	No	Shipped: No.:	1
Method of Shipment:	FedEx	Airbill Number:	
Analytical Lab:	ALS	Delivery Location:	
Lab Recipient:		Delivery Date/Time:	

1.) Chain of Custody Number = site name (e.g., SS125) and then date (yyyymmdd) collected + custody number (e.g. SS125-20110902-01)…September 2, 2011.

2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/11 = 01, if sampled again on 10/10/11 = 02, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Ground Water , WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS= Suface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ= Soil Blanks

5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

6.) Quality assurance samples are assigned by date (ddmmyy) and the number of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or ambient blank collected on May 10, 2011 in association with samples on the COC will be designated 10051101 in the Blank Lot Control Number field).

7.) Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c

Page 1 of 1

Project Number: A012-109

Chain of Custody Number (1): MAT-C3014102201

TRINITY ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Facility: Melrose Air Force Range

Project Name / Site Name: 2014 Semiannual

Client Name: Trinity (850) 613-6800

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart, Jonathan Kramer

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code [2]	Sample Number [3]	Sample Matrix [4]	Sample Analysis Requested [5]: Number of containers	VOCs (8260B)	Explosives (8330)	Metals (Total & Diss) 6020A	Cyanide (9012A)	Mercury (7470A)	Nitrite, Nitrate (300.0)	Chloride, Sulfate (300.0)	Perchlorate (6860)	Alkalinity (2320B)	TDS (2540C)	Quality Assurance Samples [6]: Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
M114MW002		22OCT2014	0935		N	1	WG	10	X	X	X	X	X	X	X	X	X	X				A
M114MW002-c		22OCT2014	0935		TB	1	WQ	3	X													A
M114MW003		22OCT2014	1110		N	1	WG	10	X	X	X	X	X	X	X	X	X	X				A
M114MW004		22OCT2014	1025		N	1	WG	10	X	X	X	X	X	X	X	X	X	X				B
M114MW004-c		22OCT2014	1025		TB	1	WQ	3	X													B
M114MW001		22OCT2014	1235		N	1	WG	10	X	X	X	X	X	X	X	X	X	X				B

Comments

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1.		10/23/14	1530			
2.						
3.						

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:	No	Shipped: No.:	2
Method of Shipment:	FedEx	Airbill Number:	
Analytical Lab:	GCAL	Delivery Location:	Baton Rouge, LA
Lab Recipient:		Delivery Date/Time:	

1.) Chain of Custody Number = site name (e.g., SS125) and then date (yyyymmdd) collected + custody number (e.g. SS125-20110902-01)…September 2, 2011.

2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/11 = 01, if sampled again on 10/10/11 = 02, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Ground Water , WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS= Suface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ= Soil Blanks

5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

6.) Quality assurance samples are assigned by date (ddmmyy) and the number of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or ambient blank collected on May 10, 2011 in association with samples on the COC will be designated 10051101 in the Blank Lot Control Number field).

7.) Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Page 1 of 1

Project Number: A012-109

Chain of Custody Number (1): MAFB20141023-1

Quote Number: _____

Chain of Custody and Analytical Request

Project Name / Site Name: Melrose AFR

Facility:

Client Name: Trinity (850) 613-6800

Project Manager: Jonathon Kramer

Collected by: Ben Stewart

Turn Around Time

- 24 Hour
- 5 Day
- Standard X
- Other

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (mm-dd-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	Alk Flashpt	TX-1005									Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
MW-01		10/23/2014	1235		N	1	WG	4	X	X												B
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

Comments

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1.		10-23-14	1630			
2.						
3.						

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: No
Method of Shipment: FedEx
Analytical Lab: GCAL
Lab Recipient:

Shipped: No.: 2
Airbill Number:
Delivery Location: Baton Rouge, LA
Delivery Date/Time:

1.) Chain of Custody Number = site name (e.g., 125) and then date (yymmdd) collected + custody number (e.g. 125-140720-01)...July 20, 2014. (13 Characters Max)

2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-01 on 07/20/14 = 01, if sampled again on 07/20/14 = 02, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Ground Water , WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS= Suface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ= Soil Blanks

5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

6.) Quality assurance samples are assigned by date (ddmmyy) and the number of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or ambient blank collected on July 20, 2014 in association with samples on the COC will be designated 20071401 in the Blank Lot Control Number field).

7.) Trip Blanks shall correspond to the first well sampled with VOCs, for example: SS125-MW-03-c

TRINITY ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Project Number: A012-109

Chain of Custody Number (1): MAFR 2014/023C3

Facility: Melrose Air Force Range

Project Name / Site Name: 2014 Semiannual

Client Name: Trinity (850) 613-6800

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart, Jonathan Kramer

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code [2]	Sample Number [3]	Sample Matrix [4]	Sample Analysis Requested [5]: Number of containers	Chromium (VI) 218.6									Quality Assurance Samples [6]: Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
MWQ-24		23 OCT 2014	0930		N	1	WG	1	X												C
MWQ-24MS		23 OCT 2014	0930		MS	1	WG	1	X												C
MWQ-24-SD		23 OCT 2014	0937		SD	1	WG	1	X												C
MA01MWQC01D		23 OCT 2014	1143		N	1	WG	1	X												C

Comments

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (signed)	Date	Time	Received by (signed)	Date	Time
1.		10/23/14	1630			
2.						
3.						

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: NC
Shipped: No.: 1
Method of Shipment: FedEx
Airbill Number:
Analytical Lab: ALS
Delivery Location: Rochester, NY
Lab Recipient:
Delivery Date/Time:

1.) Chain of Custody Number = site name (e.g., SS125) and then date (yyyymmdd) collected + custody number (e.g. SS125-20110902-01)...September 2, 2011.

2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/11 = 01, if sampled again on 10/10/11 = 02, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Ground Water , WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS= Suface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ= Soil Blanks

5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

6.) Quality assurance samples are assigned by date (ddmmyy) and the number of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or ambient blank collected on May 10, 2011 in association with samples on the COC will be designated 10051101 in the Blank Lot Control Number field).

7.) Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c

TRINITY ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Project Number: A012-109

Chain of Custody Number (1): MAFR20141023O2

Facility: Melrose Air Force Range

Project Name / Site Name: 2014 Semiannual

Client Name: Trinity (850) 613-6800

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart, Jonathan Kramer

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code [2]	Sample Number [3]	Sample Matrix [4]	Sample Analysis Requested [5]: Number of containers	VOCs (8260B)	Explosives (8330)	Metals (Total & Diss) 6020A	Cyanide (9012A)	Mercury (7470A)	Nitrite, Nitrate (300.0)	Chloride, Sulfate (300.0)	Perchlorate (6860)	Alkalinity (2320B)	TDS (2540C)	Hexavalent Chromium 7196	Quality Assurance Samples [6]: Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
MA07MW001D		23OCT2014	1143		N	1	WG	12	x	x	x	x	x	x	x	x	x	x	x				D
TB-1		23OCT2014	1143		TB	1	WQ	3	x														D

Comments: Dissolved Metals were field filtered

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1.	[signature]	10-23-14	1630			
2.						
3.						

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: No — Shipped: No.: 1

Method of Shipment: FedEx — Airbill Number:

Analytical Lab: Accutest — Delivery Location: Orlando, FL

Lab Recipient: — Delivery Date/Time:

1.) Chain of Custody Number = site name (e.g., SS125) and then date (yyyymmdd) collected + custody number (e.g. SS125-20110902-01)…September 2, 2011.

2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/11 = 01, if sampled again on 10/10/11 = 02, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Ground Water , WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS= Suface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ= Soil Blanks

5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

6.) Quality assurance samples are assigned by date (ddmmyy) and the number of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or ambient blank collected on May 10, 2011 in association with samples on the COC will be designated 10051101 in the Blank Lot Control Number field).

7.) Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c

TRINITY ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Project Number: A012-109

Chain of Custody Number (1): MAFR20141023001

Facility: Melrose Air Force Range

Project Name / Site Name: 2014 Semiannual

Client Name: Trinity (850) 613-6800

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart, Jonathan Kramer

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code[2]	Sample Number[3]	Sample Matrix[4]	Sample Analysis Requested[5]: Number of containers	VOCs (8260B)	Explosives (8330)	Metals (Total & Diss) 6020A	Cyanide (9012A)	Mercury (7470A)	Nitrite, Nitrate (300.0)	Chloride, Sulfate (300.0)	Perchlorate (6860)	Alkalinity (2320B)	TDS (2540C)	Quality Assurance Samples[6]: Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
MWQ-24		23 OCT 2014	0937		N	1	WG	10	X	X	X	X	X	X	X	X	X	X				A
MWQ-24-MS		23 OCT 2014	0937		MS	1	WG	10	X	X	X	X	X	X	X	X	X	X				A
MWQ-24-SD		23 OCT 2014	0937		SD	1	WG	10	X	X	X	X	X	X	X	X	X	X				B
MWQ-24-C		23 OCT 2014	0937		TB	1	WQ	3	X													A
MA02MW001D		23 OCT 2014	1143		N	1	WG	10	X	X	X	X	X	X	X	X	X	X				B
MA02MW001D-C		23 OCT 2014	1143		TB	1	WQ	3	X													B

Comments: Dissolved metals were field filtered

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1.		23 OCT 14	1636			
2.						
3.						

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:	No	Shipped: No.:	a
Method of Shipment:	FedEx	Airbill Number:	
Analytical Lab:	GCAL	Delivery Location:	Baton Rouge, LA
Lab Recipient:		Delivery Date/Time:	

1.) Chain of Custody Number = site name (e.g., SS125) and then date (yyyymmdd) collected + custody number (e.g. SS125-20110902-01)…September 2, 2011.

2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/11 = 01, if sampled again on 10/10/11 = 02, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Ground Water , WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS= Suface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ= Soil Blanks

5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

6.) Quality assurance samples are assigned by date (ddmmyy) and the number of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or ambient blank collected on May 10, 2011 in association with samples on the COC will be designated 10051101 in the Blank Lot Control Number field).

7.) Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c

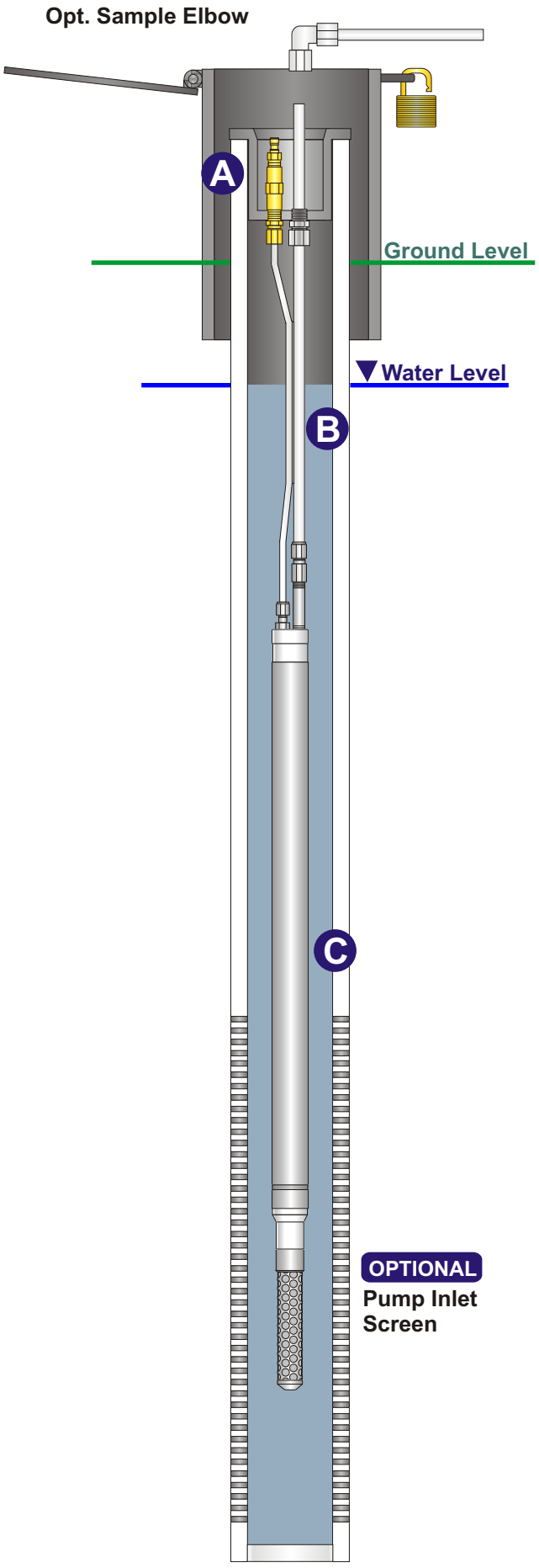
APPENDIX B

Dedicated Bladder Pump Diagram

This page intentionally left blank

WELL WIZARD®
Dedicated Monitoring Systems

SYSTEM "A" Bladder Pump Only



System Components

A Well Cap

B Pump Tubing

C Pump

Options:

Pump Inlet Screen

REV. 8-25-04

APPENDIX C

Chemical Analytical Reports
(Laboratory Analytical Reports)
(On attached CD)

This page intentionally left blank

Southeast ACCUTEST LABORATORIES

05/13/14

Technical Report for

Trinity Analysis & Development Corp

Melrose Air Force Range, NM

A012-107

Accutest Job Number: FA14479

Sampling Date: 04/24/14

Report to:

Trinity Analysis & Development Corp
1002 N Eglin Pkwy
Shalimar, FL 32579
jkramer@trinityadc.com; jbrown@trinityadc.com

ATTN: Jonathan Kramer

Total number of pages in report: **193**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Client Service contact: Sue Bell 407-425-6700

Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001) DoD ELAP (L-A-B L2229), CA (04226CA), TX (T104704404), PA (68-03573), VA (460177), AK, AR, GA, KY, MA, NV, OK, UT, WA

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories. Test results relate only to samples analyzed.

Accutest Laboratories is the sole authority for authorizing edits or modifications to this document. Unauthorized modification of this report is strictly prohibited.

Table of Contents

Sections: 1 2 3 4 5 6 7 8 9 10 11 12

Section 1: Sample Summary **4**
Section 2: Case Narrative/Conformance Summary **5**
Section 3: Summary of Hits **9**
Section 4: Sample Results **10**
4.1: FA14479-1: M114MW002 11
4.2: FA14479-1F: M114MW002 17
4.3: FA14479-2: TB-5 18
Section 5: Misc. Forms **20**
5.1: Chain of Custody 21
Section 6: GC/MS Volatiles - QC Data Summaries **24**
6.1: Method Blank Summary 25
6.2: Blank Spike Summary 27
6.3: Matrix Spike/Matrix Spike Duplicate Summary 29
6.4: Instrument Performance Checks (BFB) 31
6.5: Internal Standard Area Summaries 33
6.6: Surrogate Recovery Summaries 34
6.7: Initial and Continuing Calibration Summaries 35
Section 7: GC/MS Semi-volatiles - QC Data Summaries **47**
7.1: Method Blank Summary 48
7.2: Blank Spike Summary 49
7.3: Matrix Spike/Matrix Spike Duplicate Summary 50
7.4: Internal Standard Area Summaries 51
7.5: Initial and Continuing Calibration Summaries 52
Section 8: GC Semi-volatiles - QC Data Summaries **58**
8.1: Method Blank Summary 59
8.2: Blank Spike Summary 62
8.3: Matrix Spike/Matrix Spike Duplicate Summary 64
8.4: Surrogate Recovery Summaries 65
8.5: GC Surrogate Retention Time Summaries 66
8.6: Initial and Continuing Calibration Summaries 70
Section 9: Metals Analysis - QC Data Summaries **96**
9.1: Inst QC MA11567: Hg 97
9.2: Prep QC MP27199: Hg 107
Section 10: General Chemistry - QC Data Summaries **112**
10.1: Method Blank and Spike Results Summary 113
10.2: Duplicate Results Summary 114
10.3: Matrix Spike Results Summary 115
10.4: Matrix Spike Duplicate Results Summary 116
10.5: Inst QC GN61195: Chloride,Nitrogen, Nitrate,Nitrogen, Nitrite,Sulfate 117
10.6: Inst QC GN61275: Cyanide, Total 121
Section 11: Misc. Forms (Accutest New Jersey) **123**
11.1: Chain of Custody 124

Table of Contents

Section 12: Metals Analysis - QC Data (Accutest New Jersey) 127

12.1: Inst QC MA33923: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Tl,V,Zn 128

12.2: Inst QC MA33933: Na 149

12.3: Inst QC MA33940: Na 168

12.4: Prep QC MP79249: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn 188

Accutest Laboratories

Sample Summary

Trinity Analysis & Development Corp

Job No: FA14479

Melrose Air Force Range, NM
Project No: A012-107

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
FA14479-1	04/24/14	13:08	BS	04/25/14	AQ	Ground Water	M114MW002
FA14479-1F	04/24/14	13:08	BS	04/25/14	AQ	Groundwater Filtered	M114MW002
FA14479-2	04/24/14	13:08	BS	04/25/14	AQ	Trip Blank Water	TB-5

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Trinity Analysis & Development Corp **Job No:** FA14479

Site: Melrose Air Force Range, NM **Report Date:** 5/13/2014 1:12:13 PM

1 Sample(s), 1 Trip Blank(s) were collected on 04/24/2014 and were received at Accutest SE on 04/25/2014 properly preserved, at 2.4 Deg. C and intact. These Samples received an Accutest job number of FA14479. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ **Batch ID:** VB3993

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA14487-20MS, FA14487-20MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for Carbon disulfide are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Matrix Spike Duplicate Recovery(s) for Carbon disulfide, trans-1,3-Dichloropropene are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Extractables by GCMS By Method SW846 6850

Matrix: AQ **Batch ID:** OP51470

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA14479-1MSD, FA14479-1MS were used as the QC samples indicated.

Matrix Spike Recovery/Matrix Spike Duplicate Recovery for Perchlorate are outside control limits. Outside control limits due to high level in sample relative to spike amount. For method performance in a clean matrix, refer to Blank Spike.

Extractables by GC By Method SW846 8330A

Matrix: AQ **Batch ID:** OP51394

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA14391-6MS, FA14391-6MSD were used as the QC samples indicated.

Matrix Spike Duplicate Recovery(s) for 2,6-Dinitrotoluene are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Metals By Method SW846 6020A

Matrix: AQ **Batch ID:** N: MP79249

FA14479-1 for Magnesium: Analysis performed at Accutest Laboratories, Dayton, NJ.

FA14479-1 for Calcium: Analysis performed at Accutest Laboratories, Dayton, NJ.

FA14479-1 for Sodium: Analysis performed at Accutest Laboratories, Dayton, NJ.

FA14479-1F for Manganese: Analysis performed at Accutest Laboratories, Dayton, NJ.

FA14479-1F for Arsenic: Analysis performed at Accutest Laboratories, Dayton, NJ.

FA14479-1F for Sodium: Analysis performed at Accutest Laboratories, Dayton, NJ.

FA14479-1F for Barium: Analysis performed at Accutest Laboratories, Dayton, NJ.

FA14479-1F for Beryllium: Analysis performed at Accutest Laboratories, Dayton, NJ.

FA14479-1F for Cadmium: Analysis performed at Accutest Laboratories, Dayton, NJ.

FA14479-1F for Chromium: Analysis performed at Accutest Laboratories, Dayton, NJ.

Metals By Method SW846 6020A

Matrix: AQ **Batch ID:** N: MP79249

FA14479-1F for Cobalt: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA14479-1F for Copper: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA14479-1F for Lead: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA14479-1F for Nickel: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA14479-1F for Antimony: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA14479-1F for Potassium: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA14479-1F for Silver: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA14479-1F for Thallium: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA14479-1F for Vanadium: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA14479-1F for Zinc: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA14479-1F for Calcium: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA14479-1F for Magnesium: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA14479-1F for Iron: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA14479-1 for Manganese: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA14479-1F for Selenium: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA14479-1 for Selenium: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA14479-1 for Silver: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA14479-1 for Thallium: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA14479-1 for Vanadium: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA14479-1 for Zinc: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA14479-1 for Nickel: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA14479-1 for Lead: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA14479-1 for Iron: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA14479-1 for Copper: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA14479-1 for Chromium: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA14479-1 for Cadmium: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA14479-1 for Beryllium: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA14479-1F for Aluminum: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA14479-1 for Barium: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA14479-1 for Antimony: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA14479-1 for Arsenic: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA14479-1 for Cobalt: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA14479-1 for Potassium: Analysis performed at Accutest Laboratories, Dayton, NJ.

Metals By Method SW846 7470A

Matrix: AQ **Batch ID:** MP27199

All samples were digested within the recommended method holding time.
All samples were analyzed within the recommended method holding time.
All method blanks for this batch meet method specific criteria.
Sample(s) FA14452-4DUP, FA14452-4MS, FA14452-4MSD, FA14452-4SDL were used as the QC samples for metals.

Wet Chemistry By Method EPA 120.1

Matrix: AQ **Batch ID:** GN61256

All method blanks for this batch meet method specific criteria.
Sample(s) FA14479-1DUP were used as the QC samples for Specific Conductivity.
Specific Conductivity: Method SW846 6850 pre-requisite; standard specific conductivity hold time does not apply.

Wet Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ **Batch ID:** GP23914

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s)FA14485-3MS, FA14485-3MSD were used as the QC samples for Chloride, Nitrogen, Nitrate, Nitrogen, Nitrite, Sulfate.

Matrix Spike Recovery(s) for Nitrogen, Nitrate and Nitrogen, Nitrite are outside control limits. Spike recovery indicates possible matrix interference. Refer to lab control or spike blank for recovery information.
Matrix Spike Recovery(s) for Chloride, Sulfate are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

FA14479-1 for Nitrogen, Nitrate: Dilution required due to matrix interference.

FA14479-1 for Nitrogen, Nitrite: Dilution required due to matrix interference.

Wet Chemistry By Method EPA 335.4/SW 9012B

Matrix: AQ **Batch ID:** GP23946

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA14402-1MS, FA14402-1MSD, FA14402-1DUP were used as the QC samples for Cyanide, Total.

FA14479-1 for Cyanide, Total: Confirmed by reanalysis.

Wet Chemistry By Method SM2320 B-11

Matrix: AQ **Batch ID:** GN61290

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA14485-3DUP were used as the QC samples for Alkalinity, Total as CaCO3.

Wet Chemistry By Method SM2540 C-11

Matrix: AQ **Batch ID:** GN61240

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA14479-1DUP were used as the QC samples for Solids, Total Dissolved.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

_____ Date: May 13, 2014

Kim Benham, Client Services (signature on file)

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Accutest Laboratories Southeast, Inc.	**Job No**	FA14479
Site:	BBAFLFWB: Melrose Air Force Range, NM	**Report Date**	5/6/2014 2:35:57 PM

On 04/30/2014, 1 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at Accutest Laboratories at a temperature of 2 C. Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of FA14479 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Metals By Method SW846 6020A

Matrix: AQ **Batch ID:** MP79249

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) FA14479-1MS, FA14479-1MSD, FA14479-1PS, FA14479-1SDL were used as the QC samples for metals.
- Matrix Spike Recovery(s) for Iron are outside control limits. Spike recovery indicates possible matrix interference.
- Matrix Spike Duplicate Recovery(s) for Iron are outside control limits. Probable cause due to matrix interference.
- Matrix Spike Recovery(s) for Sodium are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- RPD(s) for Serial Dilution for Antimony, Arsenic, Cobalt, Copper, Iron, Lead, Manganese, Thallium, Zinc are outside control limits for sample MP79249-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- MP79249-SD1 for Chromium: Serial dilution indicates possible matrix interference. Results confirmed with analysis of second dilution.
- MP79249-PS1 for Sodium: spike amount is relatively low to sample result
- MP79249-SD1 for Selenium: Serial dilution indicates possible matrix interference. Results confirmed with analysis of second dilution.
- MP79249-SD1 for Vanadium: Serial dilution indicates possible matrix interference. Results confirmed with analysis of second dilution.
- MP79249-PS1 for Selenium: Spike recovery indicates possible matrix interference.
- MP79249-PS1 for Zinc: Spike recovery indicates possible matrix interference.
- MP79249-PS1 for Calcium: Spike amount low relative to the sample result.
- MP79249-PS1 for Magnesium: Spike amount low relative to the sample result.
- MP79249-SD1 for Aluminum: Serial dilution indicates possible matrix interference. Results confirmed with analysis of second dilution.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

Summary of Hits

Job Number: FA14479
Account: Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM
Collected: 04/24/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA14479-1	**M114MW002**					
Perchlorate		2.7	0.20	0.040	ug/l	SW846 6850
Barium [a]		13.0	2.0		ug/l	SW846 6020A
Calcium [a]		322000	25000		ug/l	SW846 6020A
Iron [a]		77.6	50		ug/l	SW846 6020A
Magnesium [a]		291000	25000		ug/l	SW846 6020A
Potassium [a]		14700	500		ug/l	SW846 6020A
Selenium [a]		11.3	2.0		ug/l	SW846 6020A
Sodium [a]		2470000	130000		ug/l	SW846 6020A
Vanadium [a]		8.3	3.0		ug/l	SW846 6020A
Zinc [a]		8.0	8.0		ug/l	SW846 6020A
Alkalinity, Total as CaCO3		67.5	5.0		mg/l	SM2320 B-11
Chloride		3640	200		mg/l	EPA 300/SW846 9056A
Cyanide, Total [b]		0.011	0.010		mg/l	EPA 335.4/SW 9012B
Solids, Total Dissolved		6930	1000		mg/l	SM2540 C-11
Specific Conductivity		13200	1.0		umhos/cm	EPA 120.1
Sulfate		2030	200		mg/l	EPA 300/SW846 9056A
FA14479-1F	**M114MW002**					
Barium [a]		15.1	2.0		ug/l	SW846 6020A
Calcium [a]		309000	25000		ug/l	SW846 6020A
Magnesium [a]		285000	25000		ug/l	SW846 6020A
Potassium [a]		14500	500		ug/l	SW846 6020A
Selenium [a]		12.0	2.0		ug/l	SW846 6020A
Sodium [a]		2420000	130000		ug/l	SW846 6020A
Vanadium [a]		7.5	3.0		ug/l	SW846 6020A
Zinc [a]		13.7	8.0		ug/l	SW846 6020A
FA14479-2	**TB-5**					

No hits reported in this sample.

(a) Analysis performed at Accutest Laboratories, Dayton, NJ.
(b) Confirmed by reanalysis.

Southeast ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	M114MW002		
Lab Sample ID:	FA14479-1	**Date Sampled:**	04/24/14
Matrix:	AQ - Ground Water	**Date Received:**	04/25/14
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Melrose Air Force Range, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B098110.D	1	05/02/14	WV	n/a	n/a	VB3993
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	11	ug/l	
71-43-2	Benzene	ND	1.0	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.26	ug/l	
75-25-2	Bromoform	ND	1.0	0.38	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.24	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.20	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.40	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.25	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.24	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.36	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.34	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.28	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.54	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.53	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	1.5	ug/l	
100-42-5	Styrene	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.34	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.27	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.26	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	M114MW002		
Lab Sample ID:	FA14479-1	**Date Sampled:**	04/24/14
Matrix:	AQ - Ground Water	**Date Received:**	04/25/14
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Melrose Air Force Range, NM		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.33	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.66	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		83-118%
17060-07-0	1,2-Dichloroethane-D4	104%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	89%		83-118%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: M114MW002
Lab Sample ID: FA14479-1
Matrix: AQ - Ground Water
Method: SW846 6850 SW846 6850
Project: Melrose Air Force Range, NM

Date Sampled: 04/24/14
Date Received: 04/25/14
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q5006.D	1	05/09/14	MRE	05/02/14	OP51470	SQ163
Run #2							

	Initial Volume	Final Volume
Run #1	10.0 ml	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
14797-73-0	Perchlorate	2.7	0.20	0.040	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: M114MW002
Lab Sample ID: FA14479-1
Matrix: AQ - Ground Water
Method: SW846 8330A SW846 3535A
Project: Melrose Air Force Range, NM

Date Sampled: 04/24/14
Date Received: 04/25/14
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB041690.D	1	05/02/14	KL	04/28/14	OP51394	GBB1091
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	0.19	0.076	ug/l	
121-82-4	RDX	ND	0.19	0.080	ug/l	
99-65-0	1,3-Dinitrobenzene	ND	0.19	0.076	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.19	0.076	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.19	0.081	ug/l	
35572-78-2	2-amino-4,6-Dinitrotoluene	ND	0.19	0.076	ug/l	
19406-51-0	4-amino-2,6-Dinitrotoluene	ND	0.19	0.095	ug/l	
98-95-3	Nitrobenzene	ND	0.19	0.077	ug/l	
88-72-2	o-Nitrotoluene	ND	0.19	0.085	ug/l	
99-08-1	m-Nitrotoluene	ND	0.19	0.076	ug/l	
99-99-0	p-Nitrotoluene	ND	0.19	0.076	ug/l	
479-45-8	Tetryl	ND	0.19	0.076	ug/l	
99-35-4	1,3,5-Trinitrobenzene	ND	0.19	0.076	ug/l	
118-96-7	2,4,6-Trinitrotoluene	ND	0.19	0.076	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	98%		70-136%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: M114MW002
Lab Sample ID: FA14479-1
Matrix: AQ - Ground Water
Project: Melrose Air Force Range, NM

Date Sampled: 04/24/14
Date Received: 04/25/14
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum [a]	< 50	50	ug/l	2	05/01/14	05/01/14	ANJ	SW846 6020A [2]	SW846 3010A [5]
Antimony [a]	< 4.0	4.0	ug/l	2	05/01/14	05/01/14	ANJ	SW846 6020A [2]	SW846 3010A [5]
Arsenic [a]	< 3.0	3.0	ug/l	2	05/01/14	05/01/14	ANJ	SW846 6020A [2]	SW846 3010A [5]
Barium [a]	13.0	2.0	ug/l	2	05/01/14	05/01/14	ANJ	SW846 6020A [2]	SW846 3010A [5]
Beryllium [a]	< 1.0	1.0	ug/l	2	05/01/14	05/01/14	ANJ	SW846 6020A [2]	SW846 3010A [5]
Cadmium [a]	< 6.0	6.0	ug/l	2	05/01/14	05/01/14	ANJ	SW846 6020A [2]	SW846 3010A [5]
Calcium [a]	322000	25000	ug/l	100	05/01/14	05/01/14	ANJ	SW846 6020A [2]	SW846 3010A [5]
Chromium [a]	< 8.0	8.0	ug/l	2	05/01/14	05/01/14	ANJ	SW846 6020A [2]	SW846 3010A [5]
Cobalt [a]	< 1.0	1.0	ug/l	2	05/01/14	05/01/14	ANJ	SW846 6020A [2]	SW846 3010A [5]
Copper [a]	< 8.0	8.0	ug/l	2	05/01/14	05/01/14	ANJ	SW846 6020A [2]	SW846 3010A [5]
Iron [a]	77.6	50	ug/l	2	05/01/14	05/01/14	ANJ	SW846 6020A [2]	SW846 3010A [5]
Lead [a]	< 3.0	3.0	ug/l	2	05/01/14	05/01/14	ANJ	SW846 6020A [2]	SW846 3010A [5]
Magnesium [a]	291000	25000	ug/l	100	05/01/14	05/01/14	ANJ	SW846 6020A [2]	SW846 3010A [5]
Manganese [a]	< 4.0	4.0	ug/l	2	05/01/14	05/01/14	ANJ	SW846 6020A [2]	SW846 3010A [5]
Mercury	< 0.50	0.50	ug/l	1	05/01/14	05/01/14	JL	SW846 7470A [1]	SW846 7470A [4]
Nickel [a]	< 8.0	8.0	ug/l	2	05/01/14	05/01/14	ANJ	SW846 6020A [2]	SW846 3010A [5]
Potassium [a]	14700	500	ug/l	2	05/01/14	05/01/14	ANJ	SW846 6020A [2]	SW846 3010A [5]
Selenium [a]	11.3	2.0	ug/l	2	05/01/14	05/01/14	ANJ	SW846 6020A [2]	SW846 3010A [5]
Silver [a]	< 2.0	2.0	ug/l	2	05/01/14	05/01/14	ANJ	SW846 6020A [2]	SW846 3010A [5]
Sodium [a]	2470000	130000	ug/l	500	05/01/14	05/02/14	ANJ	SW846 6020A [3]	SW846 3010A [5]
Thallium [a]	< 2.0	2.0	ug/l	2	05/01/14	05/01/14	ANJ	SW846 6020A [2]	SW846 3010A [5]
Vanadium [a]	8.3	3.0	ug/l	2	05/01/14	05/01/14	ANJ	SW846 6020A [2]	SW846 3010A [5]
Zinc [a]	8.0	8.0	ug/l	2	05/01/14	05/01/14	ANJ	SW846 6020A [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA11567
(2) Instrument QC Batch: N:MA33923
(3) Instrument QC Batch: N:MA33933
(4) Prep QC Batch: MP27199
(5) Prep QC Batch: N:MP79249

(a) Analysis performed at Accutest Laboratories, Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	M114MW002		
Lab Sample ID:	FA14479-1	**Date Sampled:**	04/24/14
Matrix:	AQ - Ground Water	**Date Received:**	04/25/14
		Percent Solids:	n/a
Project:	Melrose Air Force Range, NM		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	67.5	5.0	mg/l	1	05/02/14 14:50	LE	SM2320 B-11
Chloride	3640	200	mg/l	100	04/25/14 13:05	CH	EPA 300/SW846 9056A
Cyanide, Total [a]	0.011	0.010	mg/l	1	05/01/14 11:33	VK	EPA 335.4/SW 9012B
Nitrogen, Nitrate [b]	< 10	10	mg/l	100	04/25/14 13:05	CH	EPA 300/SW846 9056A
Nitrogen, Nitrite [b]	< 10	10	mg/l	100	04/25/14 13:05	CH	EPA 300/SW846 9056A
Solids, Total Dissolved	6930	1000	mg/l	10	04/28/14 13:00	KC	SM2540 C-11
Specific Conductivity	13200	1.0	umhos/cm	1	04/30/14 16:15	AR	EPA 120.1
Sulfate	2030	200	mg/l	100	04/25/14 13:05	CH	EPA 300/SW846 9056A

(a) Confirmed by reanalysis.
(b) Dilution required due to matrix interference.

RL = Reporting Limit

Report of Analysis

Client Sample ID: M114MW002
Lab Sample ID: FA14479-1F
Matrix: AQ - Groundwater Filtered
Project: Melrose Air Force Range, NM

Date Sampled: 04/24/14
Date Received: 04/25/14
Percent Solids: n/a

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum [a]	< 50	50	ug/l	2	05/01/14	05/01/14	ANJ	SW846 6020A [1]	SW846 3010A [3]
Antimony [a]	< 4.0	4.0	ug/l	2	05/01/14	05/01/14	ANJ	SW846 6020A [1]	SW846 3010A [3]
Arsenic [a]	< 3.0	3.0	ug/l	2	05/01/14	05/01/14	ANJ	SW846 6020A [1]	SW846 3010A [3]
Barium [a]	15.1	2.0	ug/l	2	05/01/14	05/01/14	ANJ	SW846 6020A [1]	SW846 3010A [3]
Beryllium [a]	< 1.0	1.0	ug/l	2	05/01/14	05/01/14	ANJ	SW846 6020A [1]	SW846 3010A [3]
Cadmium [a]	< 6.0	6.0	ug/l	2	05/01/14	05/01/14	ANJ	SW846 6020A [1]	SW846 3010A [3]
Calcium [a]	309000	25000	ug/l	100	05/01/14	05/01/14	ANJ	SW846 6020A [1]	SW846 3010A [3]
Chromium [a]	< 8.0	8.0	ug/l	2	05/01/14	05/01/14	ANJ	SW846 6020A [1]	SW846 3010A [3]
Cobalt [a]	< 1.0	1.0	ug/l	2	05/01/14	05/01/14	ANJ	SW846 6020A [1]	SW846 3010A [3]
Copper [a]	< 8.0	8.0	ug/l	2	05/01/14	05/01/14	ANJ	SW846 6020A [1]	SW846 3010A [3]
Iron [a]	< 50	50	ug/l	2	05/01/14	05/01/14	ANJ	SW846 6020A [1]	SW846 3010A [3]
Lead [a]	< 3.0	3.0	ug/l	2	05/01/14	05/01/14	ANJ	SW846 6020A [1]	SW846 3010A [3]
Magnesium [a]	285000	25000	ug/l	100	05/01/14	05/01/14	ANJ	SW846 6020A [1]	SW846 3010A [3]
Manganese [a]	< 4.0	4.0	ug/l	2	05/01/14	05/01/14	ANJ	SW846 6020A [1]	SW846 3010A [3]
Nickel [a]	< 8.0	8.0	ug/l	2	05/01/14	05/01/14	ANJ	SW846 6020A [1]	SW846 3010A [3]
Potassium [a]	14500	500	ug/l	2	05/01/14	05/01/14	ANJ	SW846 6020A [1]	SW846 3010A [3]
Selenium [a]	12.0	2.0	ug/l	2	05/01/14	05/01/14	ANJ	SW846 6020A [1]	SW846 3010A [3]
Silver [a]	< 2.0	2.0	ug/l	2	05/01/14	05/01/14	ANJ	SW846 6020A [1]	SW846 3010A [3]
Sodium [a]	2420000	130000	ug/l	500	05/01/14	05/05/14	ANJ	SW846 6020A [2]	SW846 3010A [3]
Thallium [a]	< 2.0	2.0	ug/l	2	05/01/14	05/01/14	ANJ	SW846 6020A [1]	SW846 3010A [3]
Vanadium [a]	7.5	3.0	ug/l	2	05/01/14	05/01/14	ANJ	SW846 6020A [1]	SW846 3010A [3]
Zinc [a]	13.7	8.0	ug/l	2	05/01/14	05/01/14	ANJ	SW846 6020A [1]	SW846 3010A [3]

(1) Instrument QC Batch: N:MA33923
(2) Instrument QC Batch: N:MA33940
(3) Prep QC Batch: N:MP79249

(a) Analysis performed at Accutest Laboratories, Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID: TB-5
Lab Sample ID: FA14479-2
Matrix: AQ - Trip Blank Water
Method: SW846 8260B
Project: Melrose Air Force Range, NM

Date Sampled: 04/24/14
Date Received: 04/25/14
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B098111.D	1	05/02/14	WV	n/a	n/a	VB3993
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	11	ug/l	
71-43-2	Benzene	ND	1.0	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.26	ug/l	
75-25-2	Bromoform	ND	1.0	0.38	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.24	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.20	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.40	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.25	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.24	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.36	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.34	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.28	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.54	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.53	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	1.5	ug/l	
100-42-5	Styrene	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.34	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.27	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.26	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-5		
Lab Sample ID:	FA14479-2	**Date Sampled:**	04/24/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/25/14
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Melrose Air Force Range, NM		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.33	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.66	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		83-118%
17060-07-0	1,2-Dichloroethane-D4	95%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	95%		83-118%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Southeast ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

FA14479

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Page 1 of 1
Project Number: A012-107
Chain of Custody Number (1): 14042402

Project Name / Site Name: Melrose Semi Spring 2014
Facility: Melrose Air Force Range
Client Name: USACE ABQ
Project Manager: Jonathon Kramer
Collected by: Benjamin Stewart 251-709-6509

Turn Around Time: 24 Hour ☐ 7 Day ☐ Standard ☒ Other ☐

	Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	Sample Code (2)	Sample Number (3)	Sample Matrix (4)	Sample Method (5)	Number of Containers	VOCs 8260B	Explosives 8330	Metals (Total & Diss.) 6020A	Cyanide 9012A	Mercury 7470A	Nitrate, Nitrite 300.0	Chloride, Sulfate 300.0	Perchlorate 6850	Alkalinity 2320B	TDS 2540C	Thallium (Total and Dissolved) 6020A	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID (Alphabetical Notation)
1	M114MW002		24042014	1308		N	1	WG		12	X	X	X	X	X	X	X	X	X	X	X				C
2	TB-5		24042014	1308		TB	1	WQ		2	X														

Comments: Dissolved metals were field filtered.

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received by (Signed)	Date	Time
1.	[signature]	4/24/14	1700	EC		
2.	Fx	04-25-14	930	[signature]		
3.						

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: No
Method of Shipment: FedEx
Analytical Lab: Accutest
Lab Recipient:
Shipped No.: 1
Airbill Number:
Delivery Location: Orlando, FL
Delivery Date/Time:

2.4

1.) Chain of Custody Number = site name (e.g., SS-123) and then date (yymmdd) collected + custody number (e.g. [illegible]) ... July 20, 2012. (12 Characters Max; No Dashes)
2.) Sample Type Codes: N = Normal Sample, TB = Trip Blank (-x) Sample, FD = Field Duplicate (-x) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-x) Samples, MS = Matrix Spike (-ms), SD = Matrix Spike Duplicate (-sd), AB = Ambient Blank (-x)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-01 on 07/20/12 = 1, if sampled again on 07-20/12 = 2, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Ground Water, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Subsurface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ = Soil Blanks
5.) Sample Method Codes: CS = Composite Sample, E2 = Elec. Submersible Pump (1982 =), G = Grab, H = Hollow Stem Auger, PP = Peristaltic Pump, W = Swab or Wipe. (See handout for more methods)
6.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
7.) Quality assurance samples are assigned by date and the number (ddmmyy-nn) of the associated QC sample (01, 02, etc.). (E.g., The first equipment blank, trip blank, or ambient blank collected on July 20, 2012 in association with samples on the COC will be designated [illegible] in the Blank Lot Control Number field)

NOTES: Trip Blanks shall correspond to the first well sampled with VOCs, for example: [illegible]. ERPIMS LOCID for TB, EB and AB are designated as FIELDQC samples.

5.1

5

FA14479: Chain of Custody
Page 1 of 3

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA14479 CLIENT: Trinity PROJECT: Melrose Semi Spring 2014

DATE/TIME RECEIVED: 04-25-14 930 {MM/DD/YY 24:00} NUMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER

AIRBILL NUMBERS: 8055 3263 9308

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- [X] TRIP BLANK PROVIDED
- [ ] TRIP BLANK NOT PROVIDED
- [ ] TRIP BLANK NOT ON COC
- [X] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [X] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM_____ 5-GRAM_____

NUMBER OF 5035 FIELD KITS ? _____

NUMBER OF LAB FILTERED METALS ? _____

TEMPERATURE INFORMATION

- [ ] IR THERM ID 1 CORR. FACTOR -0.4
- [ ] OBSERVED TEMPS: 2-8
- [ ] CORRECTED TEMPS: 24

SAMPLE INFORMATION

- [ ] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- [ ] BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] RESIDUAL CHLORINE PRESENT

{APPICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

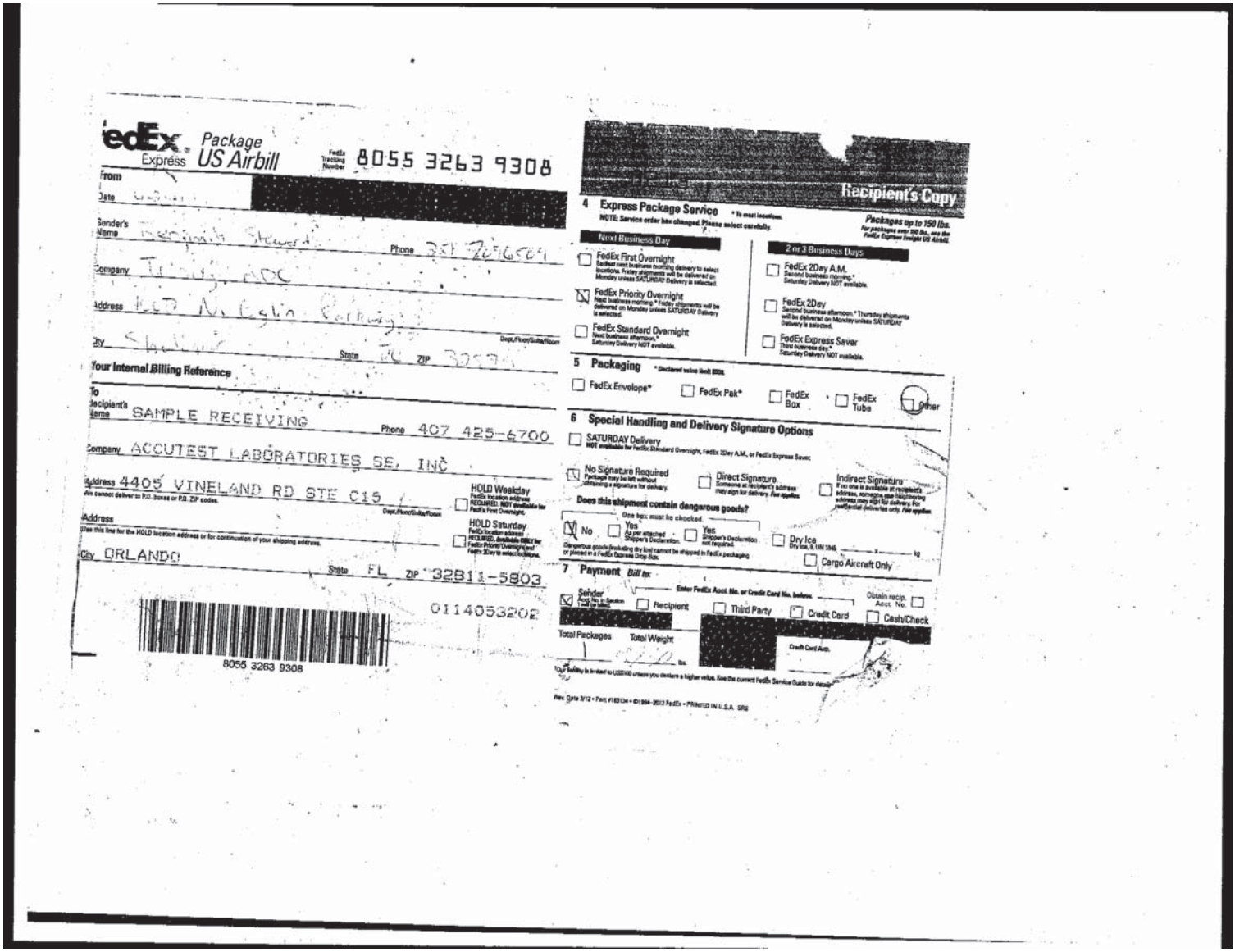
SUMMARY OF COMMENTS: _____

TECHNICIAN SIGNATURE/DATE: 04-25-14 REVIEWER SIGNATURE/DATE: 04/25/14

RS 04/14

receipt confirmation 041514.xls

FA14479: Chain of Custody
Page 2 of 3



FedEx Express Package US Airbill

FedEx Tracking Number 8055 3263 9308

From

Date

Sender's Name

Phone

Company

Address

City State ZIP

Your Internal Billing Reference

To

Recipient's Name SAMPLE RECEIVING Phone 407 425-6700

Company ACCUTEST LABORATORIES SE, INC

Address 4405 VINELAND RD STE C15

Address

City ORLANDO State FL ZIP 32811-5803

HOLD Weekday

HOLD Saturday

0114053202

8055 3263 9308

Recipient's Copy

4 Express Package Service

Next Business Day

FedEx First Overnight

FedEx Priority Overnight

FedEx Standard Overnight

2 or 3 Business Days

FedEx 2Day A.M.

FedEx 2Day

FedEx Express Saver

5 Packaging

FedEx Envelope* FedEx Pak* FedEx Box FedEx Tube Other

6 Special Handling and Delivery Signature Options

SATURDAY Delivery

No Signature Required Direct Signature Indirect Signature

Does this shipment contain dangerous goods?

No Yes Yes Dry Ice Cargo Aircraft Only

7 Payment Bill to:

Sender Recipient Third Party Credit Card Cash/Check

Total Packages Total Weight

Credit Card Auth.

FA14479: Chain of Custody

Page 3 of 3

Southeast ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB3993-MB	B098099.D	1	05/02/14	WV	n/a	n/a	VB3993

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA14479-1, FA14479-2

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	11	ug/l	
71-43-2	Benzene	ND	1.0	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.26	ug/l	
75-25-2	Bromoform	ND	1.0	0.38	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.24	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.20	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.40	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.25	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.24	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.36	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.34	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.28	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.54	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.53	ug/l	
75-09-2	Methylene chloride	2.1	5.0	2.0	ug/l	J
78-93-3	Methyl ethyl ketone	ND	5.0	1.5	ug/l	
100-42-5	Styrene	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.34	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.27	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.26	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.33	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.66	ug/l	

Method Blank Summary

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB3993-MB	B098099.D	1	05/02/14	WV	n/a	n/a	VB3993

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA14479-1, FA14479-2

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	106%	79-125%
2037-26-5	Toluene-D8	101%	85-112%
460-00-4	4-Bromofluorobenzene	92%	83-118%

Blank Spike Summary

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB3993-BS	B098098.D	1	05/02/14	WV	n/a	n/a	VB3993

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA14479-1, FA14479-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	137	110	50-147
71-43-2	Benzene	25	22.5	90	81-122
75-27-4	Bromodichloromethane	25	25.6	102	79-123
75-25-2	Bromoform	25	21.5	86	66-123
108-90-7	Chlorobenzene	25	25.9	104	82-124
75-00-3	Chloroethane	25	26.2	105	62-144
67-66-3	Chloroform	25	23.0	92	80-124
75-15-0	Carbon disulfide	25	18.5	74	66-148
56-23-5	Carbon tetrachloride	25	27.8	111	76-136
75-34-3	1,1-Dichloroethane	25	22.5	90	81-122
75-35-4	1,1-Dichloroethylene	25	22.9	92	78-137
107-06-2	1,2-Dichloroethane	25	23.6	94	75-125
78-87-5	1,2-Dichloropropane	25	23.0	92	76-124
124-48-1	Dibromochloromethane	25	23.5	94	78-122
156-59-2	cis-1,2-Dichloroethylene	25	22.0	88	78-120
10061-01-5	cis-1,3-Dichloropropene	25	23.3	93	75-118
156-60-5	trans-1,2-Dichloroethylene	25	22.4	90	76-127
10061-02-6	trans-1,3-Dichloropropene	25	24.2	97	80-120
100-41-4	Ethylbenzene	25	24.2	97	81-121
591-78-6	2-Hexanone	125	111	89	61-129
108-10-1	4-Methyl-2-pentanone	125	113	90	66-122
74-83-9	Methyl bromide	25	30.2	121	59-143
74-87-3	Methyl chloride	25	25.0	100	50-159
75-09-2	Methylene chloride	25	23.0	92	69-135
78-93-3	Methyl ethyl ketone	125	110	88	56-143
100-42-5	Styrene	25	23.7	95	78-119
71-55-6	1,1,1-Trichloroethane	25	27.0	108	75-130
79-34-5	1,1,2,2-Tetrachloroethane	25	20.2	81	72-120
79-00-5	1,1,2-Trichloroethane	25	20.3	81	76-119
127-18-4	Tetrachloroethylene	25	24.7	99	76-135
108-88-3	Toluene	25	22.2	89	80-120
79-01-6	Trichloroethylene	25	24.2	97	81-126
75-01-4	Vinyl chloride	25	24.9	100	69-159
1330-20-7	Xylene (total)	75	77.9	104	80-126

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB3993-BS	B098098.D	1	05/02/14	WV	n/a	n/a	VB3993

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA14479-1, FA14479-2

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	106%	79-125%
2037-26-5	Toluene-D8	101%	85-112%
460-00-4	4-Bromofluorobenzene	88%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA14487-20MS	B098106.D	1	05/02/14	WV	n/a	n/a	VB3993
FA14487-20MSD	B098107.D	1	05/02/14	WV	n/a	n/a	VB3993
FA14487-20	B098102.D	1	05/02/14	WV	n/a	n/a	VB3993

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA14479-1, FA14479-2

CAS No.	Compound	FA14487-20 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		125	108	86	125	112	90	4	50-147/21
71-43-2	Benzene	ND		25	24.9	100	25	24.8	99	0	81-122/14
75-27-4	Bromodichloromethane	ND		25	25.9	104	25	24.9	100	4	79-123/19
75-25-2	Bromoform	ND		25	20.1	80	25	19.1	76	5	66-123/21
108-90-7	Chlorobenzene	ND		25	28.2	113	25	28.2	113	0	82-124/14
75-00-3	Chloroethane	ND		25	26.4	106	25	26.2	105	1	62-144/20
67-66-3	Chloroform	ND		25	24.0	96	25	24.7	99	3	80-124/15
75-15-0	Carbon disulfide	0.56	J	25	16.9	65*	25	16.2	63*	4	66-148/23
56-23-5	Carbon tetrachloride	ND		25	26.7	107	25	26.0	104	3	76-136/23
75-34-3	1,1-Dichloroethane	ND		25	23.8	95	25	24.1	96	1	81-122/15
75-35-4	1,1-Dichloroethylene	ND		25	23.8	95	25	24.2	97	2	78-137/18
107-06-2	1,2-Dichloroethane	ND		25	23.9	96	25	24.9	100	4	75-125/14
78-87-5	1,2-Dichloropropane	ND		25	24.7	99	25	25.6	102	4	76-124/14
124-48-1	Dibromochloromethane	ND		25	23.7	95	25	22.4	90	6	78-122/19
156-59-2	cis-1,2-Dichloroethylene	ND		25	23.6	94	25	23.5	94	0	78-120/15
10061-01-5	cis-1,3-Dichloropropene	ND		25	20.6	82	25	21.2	85	3	75-118/23
156-60-5	trans-1,2-Dichloroethylene	ND		25	23.5	94	25	23.9	96	2	76-127/17
10061-02-6	trans-1,3-Dichloropropene	ND		25	20.4	82	25	19.8	79*	3	80-120/22
100-41-4	Ethylbenzene	ND		25	27.0	108	25	26.6	106	1	81-121/14
591-78-6	2-Hexanone	ND		125	113	90	125	116	93	3	61-129/18
108-10-1	4-Methyl-2-pentanone	ND		125	113	90	125	121	97	7	66-122/16
74-83-9	Methyl bromide	ND		25	34.2	137	25	33.0	132	4	59-143/19
74-87-3	Methyl chloride	ND		25	26.6	106	25	27.0	108	1	50-159/19
75-09-2	Methylene chloride	ND		25	24.2	97	25	24.3	97	0	69-135/16
78-93-3	Methyl ethyl ketone	ND		125	105	84	125	105	84	0	56-143/18
100-42-5	Styrene	ND		25	25.3	101	25	24.4	98	4	78-119/23
71-55-6	1,1,1-Trichloroethane	ND		25	26.6	106	25	28.0	112	5	75-130/16
79-34-5	1,1,2,2-Tetrachloroethane	ND		25	20.5	82	25	22.4	90	9	72-120/14
79-00-5	1,1,2-Trichloroethane	ND		25	22.6	90	25	22.7	91	0	76-119/14
127-18-4	Tetrachloroethylene	0.43	J	25	27.7	109	25	27.9	110	1	76-135/16
108-88-3	Toluene	ND		25	25.0	100	25	25.2	101	1	80-120/14
79-01-6	Trichloroethylene	ND		25	25.6	102	25	26.0	104	2	81-126/15
75-01-4	Vinyl chloride	ND		25	23.1	92	25	24.5	98	6	69-159/18
1330-20-7	Xylene (total)	ND		75	86.6	115	75	86.8	116	0	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA14487-20MS	B098106.D	1	05/02/14	WV	n/a	n/a	VB3993
FA14487-20MSD	B098107.D	1	05/02/14	WV	n/a	n/a	VB3993
FA14487-20	B098102.D	1	05/02/14	WV	n/a	n/a	VB3993

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA14479-1, FA14479-2

CAS No.	Surrogate Recoveries	MS	MSD	FA14487-20	Limits
1868-53-7	Dibromofluoromethane	100%	102%	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	99%	100%	99%	79-125%
2037-26-5	Toluene-D8	105%	101%	103%	85-112%
460-00-4	4-Bromofluorobenzene	88%	94%	92%	83-118%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Sample:	VB3930-BFB	**Injection Date:**	02/24/14
Lab File ID:	B096426.D	**Injection Time:**	15:39
Instrument ID:	GCMSB		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	98947	35.1		Pass
75	30.0 - 60.0% of mass 95	150680	53.4		Pass
95	Base peak, 100% relative abundance	281984	100.0		Pass
96	5.0 - 9.0% of mass 95	18509	6.56		Pass
173	Less than 2.0% of mass 174	319	0.11	(0.18) [a]	Pass
174	50.0 - 100.0% of mass 95	177216	62.8		Pass
175	5.0 - 9.0% of mass 174	12472	4.42	(7.04) [a]	Pass
176	95.0 - 101.0% of mass 174	168768	59.9	(95.2) [a]	Pass
177	5.0 - 9.0% of mass 176	10482	3.72	(6.21) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VB3930-IC3930	B096427.D	02/24/14	16:05	00:26	Initial cal 1
VB3930-IC3930	B096428.D	02/24/14	16:32	00:53	Initial cal 2
VB3930-ICC3930	B096430.D	02/24/14	17:37	01:58	Initial cal 4
VB3930-IC3930	B096431.D	02/24/14	18:03	02:24	Initial cal 5
VB3930-IC3930	B096432.D	02/24/14	18:30	02:51	Initial cal 6
VB3930-ICV3930	B096433.D	02/24/14	18:56	03:17	Initial cal verification 4
VB3930-ICV3930	B096434.D	02/24/14	19:23	03:44	Initial cal verification 4
VB3930-IC3930	B096435.D	02/24/14	19:49	04:10	Initial cal 3

Instrument Performance Check (BFB)

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Sample:	VB3993-BFB	**Injection Date:**	05/02/14
Lab File ID:	B098096.D	**Injection Time:**	08:43
Instrument ID:	GCMSB		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	92936	35.4		Pass
75	30.0 - 60.0% of mass 95	140029	53.3		Pass
95	Base peak, 100% relative abundance	262635	100.0		Pass
96	5.0 - 9.0% of mass 95	16979	6.46		Pass
173	Less than 2.0% of mass 174	640	0.24	(0.37) [a]	Pass
174	50.0 - 100.0% of mass 95	171989	65.5		Pass
175	5.0 - 9.0% of mass 174	11952	4.55	(6.95) [a]	Pass
176	95.0 - 101.0% of mass 174	164971	62.8	(95.9) [a]	Pass
177	5.0 - 9.0% of mass 176	10470	3.99	(6.35) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VB3993-CC3930	B098097.D	05/02/14	09:30	00:47	Continuing cal 4
VB3993-BS	B098098.D	05/02/14	10:21	01:38	Blank Spike
VB3993-MB	B098099.D	05/02/14	10:47	02:04	Method Blank
ZZZZZZ	B098100.D	05/02/14	11:54	03:11	(unrelated sample)
FA14487-20	B098102.D	05/02/14	12:48	04:05	(used for QC only; not part of job FA14479)
ZZZZZZ	B098103.D	05/02/14	13:14	04:31	(unrelated sample)
ZZZZZZ	B098104.D	05/02/14	13:39	04:56	(unrelated sample)
FA14487-20MS	B098106.D	05/02/14	14:33	05:50	Matrix Spike
FA14487-20MSD	B098107.D	05/02/14	15:00	06:17	Matrix Spike Duplicate
ZZZZZZ	B098108.D	05/02/14	15:55	07:12	(unrelated sample)
ZZZZZZ	B098109.D	05/02/14	16:22	07:39	(unrelated sample)
FA14479-1	B098110.D	05/02/14	16:48	08:05	M114MW002
FA14479-2	B098111.D	05/02/14	17:15	08:32	TB-5
ZZZZZZ	B098112.D	05/02/14	17:42	08:59	(unrelated sample)
ZZZZZZ	B098113.D	05/02/14	18:08	09:25	(unrelated sample)
ZZZZZZ	B098114.D	05/02/14	18:35	09:52	(unrelated sample)
ZZZZZZ	B098115.D	05/02/14	19:02	10:19	(unrelated sample)
ZZZZZZ	B098116.D	05/02/14	19:29	10:46	(unrelated sample)
ZZZZZZ	B098117.D	05/02/14	19:55	11:12	(unrelated sample)
ZZZZZZ	B098118.D	05/02/14	20:22	11:39	(unrelated sample)

Volatile Internal Standard Area Summary

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Check Std:	VB3993-CC3930	**Injection Date:**	05/02/14
Lab File ID:	B098097.D	**Injection Time:**	09:30
Instrument ID:	GCMSB	**Method:**	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Initial Cal [a]	1494023	9.90	945798	13.12	465825	15.65	194023	7.15
Check Std [b]	1384409	9.90	891366	13.12	458990	15.65	167849	7.15
Upper Limit [c]	2768818	10.40	1782732	13.62	917980	16.15	335698	7.65
Lower Limit [d]	692205	9.40	445683	12.62	229495	15.15	83925	6.65

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
VB3993-BS	1360446	9.90	931282	13.12	467289	15.65	176785	7.15
VB3993-MB	1351482	9.90	884464	13.12	450756	15.65	156726	7.14
ZZZZZZ	1441946	9.90	870162	13.12	465489	15.65	97451	7.15
FA14487-20	1355052	9.90	875638	13.12	447682	15.66	100535	7.15
ZZZZZZ	1389200	9.90	905684	13.12	444538	15.66	111474	7.15
ZZZZZZ	1373999	9.90	871633	13.12	441105	15.65	113055	7.15
FA14487-20MS	1380010	9.90	889234	13.12	471102	15.65	153461	7.15
FA14487-20MSD	1405934	9.90	930584	13.12	469820	15.65	153128	7.15
ZZZZZZ	1427463	9.90	933810	13.12	480239	15.65	162322	7.15
ZZZZZZ	1406810	9.90	905092	13.12	461483	15.65	144548	7.14
FA14479-1	1340049	9.90	899236	13.12	449903	15.65	161346	7.15
FA14479-2	1435651	9.90	909422	13.12	442667	15.65	143729	7.15
ZZZZZZ	1357591	9.90	879518	13.12	431940	15.65	140383	7.15
ZZZZZZ	1359403	9.90	885640	13.12	424616	15.65	140328	7.15
ZZZZZZ	1369644	9.90	912735	13.12	434023	15.66	144249	7.14
ZZZZZZ	1305149	9.90	876577	13.12	438143	15.66	136405	7.14
ZZZZZZ	1378413	9.90	870203	13.12	437348	15.65	138480	7.14
ZZZZZZ	1340790	9.90	871018	13.12	417485	15.65	148613	7.14
ZZZZZZ	1336708	9.90	857616	13.12	412154	15.65	138088	7.15

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5
IS 3 = 1,4-Dichlorobenzene-d4
IS 4 = Tert Butyl Alcohol-D10

(a) Initial Cal is: VB3930-ICC3930 B096430.D 02/24/14 17:37
(b) Check Std Limit = -50 to + 100% of initial cal area.
(c) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Method: SW846 8260B **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
FA14479-1	B098110.D	102	104	100	89
FA14479-2	B098111.D	95	95	101	95
FA14487-20MS	B098106.D	100	99	105	88
FA14487-20MSD	B098107.D	102	100	101	94
VB3993-BS	B098098.D	101	106	101	88
VB3993-MB	B098099.D	99	106	101	92

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	83-118%
S2 = 1,2-Dichloroethane-D4	79-125%
S3 = Toluene-D8	85-112%
S4 = 4-Bromofluorobenzene	83-118%

Initial Calibration Summary

Job Number: FA14479 **Sample:** VB3930-ICC3930
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** B096430.D
Project: Melrose Air Force Range, NM

Response Factor Report MSVOA4

Method : C:\msdchem\1\METHODS\8260bnew.m (RTE Integrator)
Title : EPA 624 & SWA 5030B/8260B
Last Update : Tue Feb 25 11:32:48 2014
Response via : Initial Calibration

Calibration Files
1 =B096427.D 2 =B096428.D 3 =B096435.D 4 =B096430.D
5 =B096431.D 6 =B096432.D

		Compound	1	2	3	4	5	6	Avg	%RSD
1)	I	Fluorobenzene	----------ISTD----------							
2)		Dichlorodifluoromet	0.308	0.300	0.344	0.363	0.354	0.353	0.337	7.82
3)	P	Chloromethane	0.579	0.509	0.492	0.530	0.511	0.512	0.522	5.81
4)	C	Vinyl Chloride	0.412	0.338	0.362	0.377	0.370	0.367	0.371	6.48
5)		Bromomethane	0.246	0.212	0.214	0.190	0.168	0.158	0.198	16.48
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9923								
		Response Ratio = 0.00000 + 0.16529 *A								
6)		Chloroethane	0.290	0.238	0.244	0.241	0.213	0.192	0.236	13.89
		---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9997								
		Response Ratio = 0.00000 + 0.26602 *A + -0.03691 *A^2								
7)		Trichlorofluorometh	0.367	0.362	0.418	0.427	0.429	0.437	0.407	8.14
8)		Ethyl Ether	0.368	0.380	0.382	0.370	0.377	0.353	0.372	2.90
9)		1,2-Dichlorotrifluo	0.339	0.330	0.377	0.376	0.380	0.363	0.361	5.90
10)		Freon 113	0.252	0.215	0.258	0.246	0.250	0.243	0.244	6.08
11)	C	1,1-Dichloroethene	0.569	0.538	0.628	0.604	0.613	0.597	0.592	5.50
12)		Acetone	0.178	0.157	0.132	0.141	0.139	0.131	0.146	12.46
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9983								
		Response Ratio = 0.00000 + 0.13443 *A								
13)		Iodomethane	0.316	0.303	0.358	0.335	0.346	0.345	0.334	6.21
14)		Carbon Disulfide	0.867	0.815	0.921	0.904	0.909	0.867	0.880	4.46
15)		Methyl acetate	0.512	0.495	0.443	0.459	0.447	0.401	0.460	8.68
16)		Methylene Chloride	2.757	1.269	0.858	0.806	0.780	0.731	1.200	65.57
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9986								
		Response Ratio = 0.00000 + 0.75636 *A								
17)		Methyl Tert Butyl E	0.877	0.858	0.916	0.840	0.861	0.839	0.865	3.31
18)		trans-1,2-Dichloroe	0.640	0.584	0.660	0.614	0.629	0.608	0.623	4.24
19)		Acrylonitrile	0.214	0.221	0.205	0.203	0.217	0.198	0.210	4.29
20)		Hexane	0.646	0.570	0.709	0.684	0.699	0.666	0.662	7.64
21)		Di-isopropyl ether	1.926	1.896	1.905	1.834	1.753	1.608	1.820	6.68
22)		Vinyl acetate	1.145	1.197	1.116	1.101	1.039	0.872	1.078	10.53
23)	P	1,1-Dichloroethane	0.730	0.677	0.737	0.681	0.675	0.643	0.690	5.20
24)		ETBE	1.364	1.371	1.509	1.403	1.430	1.395	1.412	3.76
25)		2-Butanone	0.776	0.805	0.692	0.720	0.681	0.622	0.716	9.32
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9946								
		Response Ratio = 0.00000 + 0.65010 *A								
26)		2,2-Dichloropropane	0.402	0.362	0.468	0.421	0.435	0.434	0.420	8.52
27)		cis-1,2-Dichloroeth	0.320	0.294	0.315	0.296	0.294	0.285	0.301	4.55
28)		Bromochloromethane	0.124	0.116	0.123	0.119	0.120	0.116	0.120	2.84
29)		Tetrahydrofuran	0.171	0.161	0.149	0.158	0.157	0.151	0.158	4.93
30)	C	Chloroform	0.579	0.530	0.566	0.536	0.546	0.530	0.548	3.70
31)	S	Dibromofluoromethan	0.235	0.244	0.238	0.241	0.236	0.232	0.238	1.80

Initial Calibration Summary

Job Number: FA14479 **Sample:** VB3930-ICC3930
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** B096430.D
Project: Melrose Air Force Range, NM

		---- Linear regression ---- Coefficient = 0.9964							
		Response Ratio = 0.01238 + 0.22880 *A							
32)		1,1,1-Trichloroetha	0.396	0.388	0.490	0.455	0.469	0.480	0.446	9.79
33)		Cyclohexane	0.745	0.696	0.849	0.845	0.832	0.808	0.796	7.78
34)		Carbon Tetrachlorid	0.279	0.274	0.352	0.325	0.337	0.350	0.320	10.88
35)		1,1-Dichloropropene	0.387	0.347	0.407	0.381	0.390	0.389	0.383	5.13
36)	S	1,2-Dichloroethane-	0.443	0.457	0.451	0.434	0.440	0.432	0.443	2.18
		---- Linear regression ---- Coefficient = 0.9935							
		Response Ratio = 0.01410 + 0.43296 *A							
37)		TAME	0.909	0.837	0.903	0.864	0.840	0.810	0.861	4.57
38)		Benzene	1.175	1.070	1.153	1.108	1.064	1.033	1.100	4.99
39)		1,2-Dichloroethane	0.653	0.609	0.636	0.602	0.598	0.585	0.614	4.16
40)		Trichloroethene	0.284	0.249	0.302	0.280	0.292	0.286	0.282	6.28
41)		Methylcyclohexane	0.417	0.406	0.493	0.466	0.468	0.457	0.451	7.36
42)	C	1,2-Dichloropropane	0.388	0.401	0.413	0.393	0.393	0.385	0.396	2.57
43)		Dibromomethane	0.197	0.191	0.196	0.192	0.192	0.183	0.192	2.60
44)		Bromodichloromethan	0.365	0.378	0.427	0.408	0.421	0.408	0.401	6.10
45)		2-Chloroethyl vinyl	0.251	0.276	0.276	0.259	0.246	0.223	0.255	7.92
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9934							
		Response Ratio = 0.00000 + 0.23439 *A							
46)		2-Nitropropane	0.097	0.118	0.123	0.142	0.141	0.132	0.126	13.38
47)		cis-1,3-Dichloropro	0.427	0.455	0.529	0.497	0.506	0.492	0.484	7.68
48)		4-Methyl-2-pentanon	0.506	0.563	0.514	0.512	0.494	0.438	0.505	8.00
49)	I	Chlorobenzene-d5	----------ISTD----------							
50)	S	Toluene-d8	1.469	1.408	1.369	1.447	1.299	1.371	1.394	4.42
51)	C	Toluene	2.216	1.703	1.830	1.744	1.700	1.689	1.814	11.24
52)		trans-1,3-Dichlorop	0.570	0.628	0.692	0.692	0.698	0.711	0.665	8.25
53)		1,1,2-Trichloroetha	0.408	0.345	0.357	0.360	0.360	0.351	0.363	6.16
54)		Tetrachloroethene	0.325	0.282	0.346	0.332	0.329	0.341	0.326	6.92
55)		2-hexanone	0.538	0.569	0.541	0.578	0.538	0.503	0.544	4.91
56)		1,3-Dichloropropane	0.737	0.696	0.715	0.689	0.667	0.652	0.693	4.49
57)		Dibromochloromethan	0.309	0.335	0.388	0.388	0.395	0.395	0.368	10.03
58)		1,2-Dibromoethane	0.354	0.373	0.383	0.381	0.390	0.386	0.378	3.39
59)		1-Chlorohexane	0.489	0.499	0.652	0.625	0.612	0.619	0.583	12.03
60)	P	Chlorobenzene	1.015	0.886	0.992	0.938	0.911	0.927	0.945	5.22
61)	C	Ethylbenzene	2.133	1.821	2.171	2.029	1.958	1.915	2.005	6.64
62)		1,1,1,2-Tetrachloro	0.330	0.299	0.355	0.341	0.336	0.343	0.334	5.76
63)		m,p-Xylene	1.479	1.425	1.638	1.514	1.408	1.386	1.475	6.28
64)		o-Xylene	1.488	1.445	1.677	1.544	1.464	1.440	1.510	5.97
65)		Styrene	1.074	1.040	1.225	1.146	1.082	1.054	1.104	6.34
66)	P	Bromoform	0.191	0.207	0.253	0.263	0.269	0.271	0.242	14.26
67)	I	1,4-Dichlorobenzene-d	----------ISTD----------							
68)		Isopropylbenzene	3.019	2.885	3.530	3.297	3.267	3.231	3.205	7.06
69)		Cyclohexanone	0.032	0.043	0.039	0.048	0.053	0.053	0.045	18.43
		---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9978							
		Response Ratio = 0.00000 + 0.04517 *A + 0.00081 *A^2							
70)	S	4-Bromofluorobenzen	1.328	1.278	1.276	1.313	1.241	1.245	1.280	2.72
		---- Linear regression ---- Coefficient = 0.9992							
		Response Ratio = 0.15783 + 1.16474 *A							
71)	P	1,1,2,2-Tetrachloro	1.291	1.230	1.185	1.229	1.208	1.155	1.216	3.80
72)		trans-1,4-Dichloro-	0.476	0.566	0.617	0.645	0.649	0.638	0.599	11.24
73)		n-Propylbenzene	4.342	4.157	4.855	4.628	4.498	4.276	4.459	5.72
74)		Bromobenzene	0.860	0.841	0.896	0.835	0.830	0.806	0.845	3.60

Initial Calibration Summary

Job Number: FA14479 **Sample:** VB3930-ICC3930
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** B096430.D
Project: Melrose Air Force Range, NM

75)	1,2,3-Trichloroprop	0.247	0.295	0.290	0.279	0.292	0.280	0.280	6.24
76)	1,3,5-Trimethylbenz	2.997	2.889	3.354	3.149	3.023	2.863	3.046	6.00
77)	2-Chlorotoluene	3.425	3.089	3.408	3.236	3.113	2.934	3.201	6.03
78)	4-Chlorotoluene	3.135	2.751	3.158	2.951	3.007	2.858	2.977	5.31
79)	tert-Butylbenzene	1.825	1.767	2.283	2.096	2.110	2.097	2.030	9.62
80)	1,2,4-Trimethylbenz	2.962	2.865	3.452	3.246	3.227	3.063	3.136	6.83
81)	sec-Butylbenzene	3.209	3.285	3.958	3.761	3.699	3.521	3.572	8.09
82)	4-Isopropyltoluene	2.303	2.401	3.108	2.787	2.964	2.828	2.732	11.59
83)	1,3-Dichlorobenzene	1.510	1.318	1.483	1.384	1.388	1.360	1.407	5.25
84)	1,4-Dichlorobenzene	1.742	1.481	1.621	1.524	1.494	1.449	1.552	7.09
85)	Benzyl Chloride	1.476	1.801	2.209	2.281	2.330	2.269	2.061	16.75

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9997
Response Ratio = 0.00000 + 2.30958 *A + -0.01412 *A^2

86)	n-Butylbenzene	3.429	3.292	4.105	3.951	3.828	3.622	3.704	8.44
87)	1,2-Dichlorobenzene	1.417	1.360	1.480	1.399	1.383	1.336	1.396	3.58
88)	1,2-Dibromo-3-Chlor	0.258	0.189	0.226	0.225	0.239	0.236	0.229	9.92
89)	1,2,4-Trichlorobenz	0.992	0.973	1.239	1.105	1.147	1.135	1.099	9.16
90)	Hexachlorobutadiene	0.527	0.516	0.689	0.608	0.657	0.669	0.611	12.18
91)	Naphthalene	2.466	2.582	3.116	2.881	2.961	2.827	2.805	8.62
92)	1,2,3-Trichlorobenz	0.870	0.967	1.169	1.026	1.067	1.053	1.025	9.83
93) I	Tert Butyl alcohol-d1	----------ISTD----------							
94)	Acrolein	3.461	3.662	3.818	3.649	3.421	3.198	3.535	6.22
95)	Tert-Butyl Alcohol	1.514	1.410	1.496	1.434	1.457	1.417	1.454	2.93
96)	Tert amyl alcohol	1.010	1.069	1.255	1.252	1.193	1.222	1.167	8.81
97)	1,4-Dioxane	0.076	0.076	0.083	0.080	0.088	0.086	0.081	5.87

(#) = Out of Range

8260bnew.m Wed Feb 26 13:45:17 2014

Initial Calibration Verification

Job Number: FA14479 **Sample:** VB3930-ICV3930
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** B096433.D
Project: Melrose Air Force Range, NM

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\022414\B096433.D Vial: 10
Acq On : 24 Feb 2014 6:56 pm Operator: wilfredo
Sample : icv3930-4 Inst : MSVOA4
Misc : MS26480,VB3930,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\METHODS\8260bnew.m (RTE Integrator)
Title : EPA 624 & SWA 5030B/8260B
Last Update : Tue Feb 25 11:32:48 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	101	0.00	9.90
2	Dichlorodifluoromethane	0.337	0.364	-8.0	102	0.00	4.38
3 P	Chloromethane	0.522	0.519	0.6	99	0.00	4.67
4 C	Vinyl Chloride	0.371	0.373	-0.5	100	0.00	4.90
		Amount	Calc.	%Drift			
5	Bromomethane	40.000	49.718	-24.3#	110	0.00	5.47
6	Chloroethane	40.000	38.665	3.3	96	0.00	5.62
		AvgRF	CCRF	%Dev			
7	Trichlorofluoromethane	0.407	0.417	-2.5	99	0.01	6.02
8	Ethyl Ether	0.372	0.362	2.7	99	0.00	6.33
9	1,2-Dichlorotrifluoroetha	0.361	0.378	-4.7	102	0.01	6.30
10	Freon 113	0.244	0.239	2.0	98	0.00	6.68
11 C	1,1-Dichloroethene	0.592	0.624	-5.4	105	0.01	6.70
		Amount	Calc.	%Drift			
12	Acetone	200.000	190.021	5.0	92	0.00	6.67
		AvgRF	CCRF	%Dev			
13	Iodomethane	0.334	0.334	0.0	101	0.00	6.93
14	Carbon Disulfide	0.880	0.804	8.6	90	0.00	7.07
15	Methyl acetate	0.460	0.373	18.9	83	0.00	7.06
		Amount	Calc.	%Drift			
16	Methylene Chloride	40.000	42.074	-5.2	100	0.00	7.25
		AvgRF	CCRF	%Dev			
17	Methyl Tert Butyl Ether	0.865	0.862	0.3	104	0.00	7.55
18	trans-1,2-Dichloroethene	0.623	0.612	1.8	101	0.00	7.59
19	Acrylonitrile	0.210	0.199	5.2	99	0.00	7.48
20	Hexane	0.662	0.667	-0.8	99	0.01	7.88
21	Di-isopropyl ether	1.820	1.719	5.5	95	0.00	8.05
22	Vinyl acetate	1.078	1.106	-2.6	102	0.00	8.01
23 P	1,1-Dichloroethane	0.690	0.677	1.9	101	0.00	8.05
24	ETBE	1.412	1.361	3.6	98	0.00	8.44
		Amount	Calc.	%Drift			
25	2-Butanone	200.000	193.790	3.1	89	0.00	8.63
		AvgRF	CCRF	%Dev			
26	2,2-Dichloropropane	0.420	0.442	-5.2	107	0.00	8.71

Initial Calibration Verification

Job Number: FA14479 **Sample:** VB3930-ICV3930
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** B096433.D
Project: Melrose Air Force Range, NM

27		cis-1,2-Dichloroethene	0.301	0.299	0.7	102	0.00	8.68
28		Bromochloromethane	0.120	0.118	1.7	101	0.00	8.94
29		Tetrahydrofuran	0.158	0.140	11.4	90	0.00	9.00
30	C	Chloroform	0.548	0.529	3.5	100	0.00	8.98
		----------	Amount	Calc.	%Drift	----------		
31	S	Dibromofluoromethane	50.000	50.198	-0.4	102	0.01	9.16
		----------	AvgRF	CCRF	%Dev	----------		
32		1,1,1-Trichloroethane	0.446	0.478	-7.2	107	0.00	9.27
33		Cyclohexane	0.796	0.854	-7.3	103	0.00	9.37
34		Carbon Tetrachloride	0.320	0.350	-9.4	109	0.00	9.46
35		1,1-Dichloropropene	0.383	0.400	-4.4	107	0.00	9.42
		----------	Amount	Calc.	%Drift	----------		
36	S	1,2-Dichloroethane-d4	50.000	50.318	-0.6	105	0.00	9.54
		----------	AvgRF	CCRF	%Dev	----------		
37		TAME	0.861	0.834	3.1	98	0.00	9.68
38		Benzene	1.100	1.087	1.2	100	0.00	9.66
39		1,2-Dichloroethane	0.614	0.616	-0.3	104	0.00	9.62
40		Trichloroethene	0.282	0.287	-1.8	104	0.00	10.29
41		Methylcyclohexane	0.451	0.474	-5.1	103	0.00	10.56
42	C	1,2-Dichloropropane	0.396	0.402	-1.5	104	0.00	10.53
43		Dibromomethane	0.192	0.193	-0.5	102	0.00	10.66
44		Bromodichloromethane	0.401	0.424	-5.7	105	0.00	10.77
		----------	Amount	Calc.	%Drift	----------		
45		2-Chloroethyl vinyl ether	200.000	220.955	-10.5	101	0.00	10.99
		----------	AvgRF	CCRF	%Dev	----------		
46		2-Nitropropane	0.126	0.120	4.8	86	0.00	10.96
47		cis-1,3-Dichloropropene	0.484	0.507	-4.8	104	0.00	11.23
48		4-Methyl-2-pentanone	0.505	0.488	3.4	97	0.00	11.32
49	I	Chlorobenzene-d5	1.000	1.000	0.0	104	0.00	13.12
50	S	Toluene-d8	1.394	1.439	-3.2	104	0.00	11.55
51	C	Toluene	1.814	1.770	2.4	106	0.00	11.63
52		trans-1,3-Dichloropropene	0.665	0.741	-11.4	112	0.00	11.77
53		1,1,2-Trichloroethane	0.363	0.356	1.9	103	0.00	12.00
54		Tetrachloroethene	0.326	0.343	-5.2	108	0.00	12.25
55		2-hexanone	0.544	0.525	3.5	95	0.00	12.18
56		1,3-Dichloropropane	0.693	0.707	-2.0	107	0.00	12.19
57		Dibromochloromethane	0.368	0.396	-7.6	106	0.00	12.47
58		1,2-Dibromoethane	0.378	0.393	-4.0	108	0.00	12.65
59		1-Chlorohexane	0.583	0.582	0.2	97	0.00	13.02
60	P	Chlorobenzene	0.945	1.009	-6.8	112	0.00	13.15
61	C	Ethylbenzene	2.005	2.069	-3.2	106	0.00	13.22
62		1,1,1,2-Tetrachloroethane	0.334	0.359	-7.5	110	0.00	13.21
63		m,p-Xylene	1.475	1.606	-8.9	111	0.00	13.34
64		o-Xylene	1.510	1.662	-10.1	112	0.00	13.79
65		Styrene	1.104	1.137	-3.0	103	0.00	13.79
66	P	Bromoform	0.242	0.262	-8.3	104	0.00	14.05
67	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	107	0.00	15.66
68		Isopropylbenzene	3.205	3.605	-12.5	117	0.00	14.16
		----------	Amount	Calc.	%Drift	----------		
69		Cyclohexanone	200.000	148.323	25.8#	79	0.00	14.31
70	S	4-Bromofluorobenzene	50.000	48.778	2.4	105	0.00	14.37

Initial Calibration Verification

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM
Sample: VB3930-ICV3930
Lab FileID: B096433.D

		AvgRF	CCRF	%Dev			
71 P	1,1,2,2-Tetrachloroethane	1.216	1.197	1.6	104	0.00	14.44
72	trans-1,4-Dichloro-2-Bute	0.599	0.593	1.0	98	0.00	14.49
73	n-Propylbenzene	4.459	4.938	-10.7	114	0.00	14.61
74	Bromobenzene	0.845	0.856	-1.3	109	0.00	14.59
75	1,2,3-Trichloropropane	0.280	0.288	-2.9	110	0.00	14.53
76	1,3,5-Trimethylbenzene	3.046	2.980	2.2	101	0.00	14.78
77	2-Chlorotoluene	3.201	3.322	-3.8	110	0.00	14.77
78	4-Chlorotoluene	2.977	3.244	-9.0	117	0.00	14.87
79	tert-Butylbenzene	2.030	2.230	-9.9	114	0.00	15.17
80	1,2,4-Trimethylbenzene	3.136	3.152	-0.5	104	0.00	15.22
81	sec-Butylbenzene	3.572	3.998	-11.9	113	0.00	15.41
82	4-Isopropyltoluene	2.732	3.075	-12.6	118	0.00	15.54
83	1,3-Dichlorobenzene	1.407	1.527	-8.5	118	0.00	15.60
84	1,4-Dichlorobenzene	1.552	1.557	-0.3	109	0.00	15.68

		Amount	Calc.	%Drift			
85	Benzyl Chloride	40.000	34.360	14.1	92	0.00	15.80

		AvgRF	CCRF	%Dev			
86	n-Butylbenzene	3.704	3.693	0.3	100	0.00	15.99
87	1,2-Dichlorobenzene	1.396	1.484	-6.3	113	0.00	16.12
88	1,2-Dibromo-3-Chloropropa	0.229	0.230	-0.4	109	0.00	16.94
89	1,2,4-Trichlorobenzene	1.099	1.155	-5.1	112	0.00	17.92
90	Hexachlorobutadiene	0.611	0.675	-10.5	119	0.00	18.07
91	Naphthalene	2.805	2.925	-4.3	108	0.00	18.25
92	1,2,3-Trichlorobenzene	1.025	1.097	-7.0	114	0.00	18.54
93 I	Tert Butyl alcohol-d10	1.000	1.000	0.0	92	0.00	7.15
94	Acrolein	3.535	4.560	-29.0#	115	0.00	6.50
95	Tert-Butyl Alcohol	1.454	1.397	3.9	90	0.00	7.25
96	Tert amyl alcohol	1.167	1.208	-3.5	89	0.00	9.45
97	1,4-Dioxane	0.081	0.067	17.3	77	0.01	10.62

(#) = Out of Range SPCC's out = 0 CCC's out = 0
B096430.D 8260bnew.m Wed Feb 26 13:45:02 2014

Initial Calibration Verification

Job Number: FA14479 **Sample:** VB3930-ICV3930
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** B096434.D
Project: Melrose Air Force Range, NM

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\022414\B096434.D Vial: 11
Acq On : 24 Feb 2014 7:23 pm Operator: wilfredo
Sample : icv3930-4 Inst : MSVOA4
Misc : MS26480,VB3930,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\METHODS\8260bnew.m (RTE Integrator)
Title : EPA 624 & SWA 5030B/8260B
Last Update : Tue Feb 25 11:32:48 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	102	0.00	9.90
2	Dichlorodifluoromethane	0.337	0.391	-16.0	109	0.00	4.37
3 P	Chloromethane	0.522	0.567	-8.6	109	0.00	4.66
4 C	Vinyl Chloride	0.371	0.403	-8.6	109	0.00	4.89
		Amount	Calc.	%Drift			
5	Bromomethane	40.000	49.633	-24.1#	110	0.00	5.46
6	Chloroethane	40.000	38.534	3.7	96	0.00	5.61
		AvgRF	CCRF	%Dev			
7	Trichlorofluoromethane	0.407	0.463	-13.8	110	0.00	6.01
8	Ethyl Ether	0.372	0.354	4.8	97	0.00	6.32
9	1,2-Dichlorotrifluoroetha	0.361	0.382	-5.8	103	0.00	6.30
10	Freon 113	0.244	0.239	2.0	99	0.00	6.67
11 C	1,1-Dichloroethene	0.592	0.616	-4.1	104	0.00	6.69
		Amount	Calc.	%Drift			
12	Acetone	200.000	189.600	5.2	92	0.00	6.67
		AvgRF	CCRF	%Dev			
13	Iodomethane	0.334	0.330	1.2	100	0.00	6.93
14	Carbon Disulfide	0.880	0.775	11.9	87	0.00	7.06
15	Methyl acetate	0.460	0.366	20.4#	81	0.00	7.06
		Amount	Calc.	%Drift			
16	Methylene Chloride	40.000	41.215	-3.0	98	0.00	7.24
		AvgRF	CCRF	%Dev			
17	Methyl Tert Butyl Ether	0.865	0.827	4.4	100	0.00	7.55
18	trans-1,2-Dichloroethene	0.623	0.602	3.4	99	0.00	7.59
19	Acrylonitrile	0.210	0.200	4.8	100	0.00	7.47
20	Hexane	0.662	0.656	0.9	97	0.00	7.87
21	Di-isopropyl ether	1.820	1.747	4.0	97	0.00	8.04
22	Vinyl acetate	1.078	1.127	-4.5	104	0.00	8.00
23 P	1,1-Dichloroethane	0.690	0.679	1.6	101	0.00	8.05
24	ETBE	1.412	1.395	1.2	101	0.00	8.44
		Amount	Calc.	%Drift			
25	2-Butanone	200.000	194.869	2.6	89	0.00	8.62
		AvgRF	CCRF	%Dev			
26	2,2-Dichloropropane	0.420	0.439	-4.5	106	0.00	8.71

Initial Calibration Verification

Job Number: FA14479 **Sample:** VB3930-ICV3930
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** B096434.D
Project: Melrose Air Force Range, NM

27		cis-1,2-Dichloroethene	0.301	0.293	2.7	101	0.00	8.67
28		Bromochloromethane	0.120	0.117	2.5	100	0.00	8.94
29		Tetrahydrofuran	0.158	0.145	8.2	93	0.00	8.99
30	C	Chloroform	0.548	0.541	1.3	103	0.00	8.97
		----------	Amount	Calc.	%Drift	----------		
31	S	Dibromofluoromethane	50.000	50.263	-0.5	102	0.00	9.15
		----------	AvgRF	CCRF	%Dev	----------		
32		1,1,1-Trichloroethane	0.446	0.479	-7.4	107	0.00	9.26
33		Cyclohexane	0.796	0.861	-8.2	104	0.00	9.36
34		Carbon Tetrachloride	0.320	0.341	-6.6	107	0.00	9.45
35		1,1-Dichloropropene	0.383	0.402	-5.0	107	0.00	9.41
		----------	Amount	Calc.	%Drift	----------		
36	S	1,2-Dichloroethane-d4	50.000	49.800	0.4	104	0.00	9.54
		----------	AvgRF	CCRF	%Dev	----------		
37		TAME	0.861	0.849	1.4	100	0.00	9.67
38		Benzene	1.100	1.091	0.8	100	0.00	9.66
39		1,2-Dichloroethane	0.614	0.612	0.3	103	0.00	9.62
40		Trichloroethene	0.282	0.291	-3.2	106	0.00	10.29
41		Methylcyclohexane	0.451	0.487	-8.0	106	0.00	10.55
42	C	1,2-Dichloropropane	0.396	0.398	-0.5	103	0.00	10.53
43		Dibromomethane	0.192	0.191	0.5	101	0.00	10.66
44		Bromodichloromethane	0.401	0.427	-6.5	106	0.00	10.77
		----------	Amount	Calc.	%Drift	----------		
45		2-Chloroethyl vinyl ether	200.000	202.009	-1.0	93	0.00	10.99
		----------	AvgRF	CCRF	%Dev	----------		
46		2-Nitropropane	0.126	0.121	4.0	86	0.00	10.96
47		cis-1,3-Dichloropropene	0.484	0.496	-2.5	101	0.00	11.22
48		4-Methyl-2-pentanone	0.505	0.485	4.0	96	0.00	11.32
49	I	Chlorobenzene-d5	1.000	1.000	0.0	106	0.00	13.12
50	S	Toluene-d8	1.394	1.432	-2.7	105	0.00	11.55
51	C	Toluene	1.814	1.735	4.4	105	0.00	11.63
52		trans-1,3-Dichloropropene	0.665	0.736	-10.7	113	0.00	11.77
53		1,1,2-Trichloroethane	0.363	0.347	4.4	102	0.00	12.00
54		Tetrachloroethene	0.326	0.342	-4.9	109	0.00	12.25
55		2-hexanone	0.544	0.518	4.8	95	0.00	12.18
56		1,3-Dichloropropane	0.693	0.680	1.9	105	0.00	12.19
57		Dibromochloromethane	0.368	0.387	-5.2	106	0.00	12.47
58		1,2-Dibromoethane	0.378	0.387	-2.4	108	0.00	12.64
59		1-Chlorohexane	0.583	0.597	-2.4	101	0.00	13.02
60	P	Chlorobenzene	0.945	1.017	-7.6	115	0.00	13.15
61	C	Ethylbenzene	2.005	2.050	-2.2	107	0.00	13.22
62		1,1,1,2-Tetrachloroethane	0.334	0.357	-6.9	111	0.00	13.21
63		m,p-Xylene	1.475	1.593	-8.0	111	0.00	13.34
64		o-Xylene	1.510	1.698	-12.5	116	0.00	13.79
65		Styrene	1.104	1.163	-5.3	107	0.00	13.79
66	P	Bromoform	0.242	0.260	-7.4	105	0.00	14.05
67	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	106	0.00	15.66
68		Isopropylbenzene	3.205	3.710	-15.8	119	0.00	14.16
		----------	Amount	Calc.	%Drift	----------		
69		Cyclohexanone	200.000	180.863	9.6	96	0.00	14.31
70	S	4-Bromofluorobenzene	50.000	50.139	-0.3	107	0.00	14.37

Initial Calibration Verification

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Sample: VB3930-ICV3930
Lab FileID: B096434.D

		AvgRF	CCRF	%Dev			
71 P	1,1,2,2-Tetrachloroethane	1.216	1.206	0.8	104	0.00	14.44
72	trans-1,4-Dichloro-2-Bute	0.599	0.610	-1.8	100	0.00	14.49
73	n-Propylbenzene	4.459	5.037	-13.0	115	0.00	14.61
74	Bromobenzene	0.845	0.859	-1.7	109	0.00	14.59
75	1,2,3-Trichloropropane	0.280	0.294	-5.0	112	0.00	14.53
76	1,3,5-Trimethylbenzene	3.046	3.093	-1.5	104	0.00	14.78
77	2-Chlorotoluene	3.201	3.445	-7.6	113	0.00	14.77
78	4-Chlorotoluene	2.977	3.369	-13.2	121	0.00	14.87
79	tert-Butylbenzene	2.030	2.355	-16.0	119	0.00	15.17
80	1,2,4-Trimethylbenzene	3.136	3.291	-4.9	107	0.00	15.22
81	sec-Butylbenzene	3.572	4.144	-16.0	117	0.00	15.41
82	4-Isopropyltoluene	2.732	3.230	-18.2	123	0.00	15.54
83	1,3-Dichlorobenzene	1.407	1.568	-11.4	120	0.00	15.60
84	1,4-Dichlorobenzene	1.552	1.578	-1.7	110	0.00	15.68

		Amount	Calc.	%Drift			
85	Benzyl Chloride	40.000	34.432	13.9	92	0.00	15.80

		AvgRF	CCRF	%Dev			
86	n-Butylbenzene	3.704	3.795	-2.5	102	0.00	15.99
87	1,2-Dichlorobenzene	1.396	1.530	-9.6	116	0.00	16.12
88	1,2-Dibromo-3-Chloropropa	0.229	0.229	0.0	108	0.00	16.94
89	1,2,4-Trichlorobenzene	1.099	1.171	-6.6	112	0.00	17.92
90	Hexachlorobutadiene	0.611	0.709	-16.0	124	0.00	18.07
91	Naphthalene	2.805	2.929	-4.4	108	0.00	18.25
92	1,2,3-Trichlorobenzene	1.025	1.097	-7.0	113	0.00	18.55
93 I	Tert Butyl alcohol-d10	1.000	1.000	0.0	103	0.00	7.15
94	Acrolein	3.535	4.061	-14.9	114	0.00	6.50
95	Tert-Butyl Alcohol	1.454	1.456	-0.1	104	0.00	7.24
96	Tert amyl alcohol	1.167	1.179	-1.0	97	0.00	9.45
97	1,4-Dioxane	0.081	0.086	-6.2	111	0.00	10.62

(#) = Out of Range SPCC's out = 0 CCC's out = 0
B096430.D 8260bnew.m Wed Feb 26 13:45:04 2014

Continuing Calibration Summary

Job Number: FA14479 **Sample:** VB3993-CC3930
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** B098097.D
Project: Melrose Air Force Range, NM

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\050214\B098097.D Vial: 2
Acq On : 2 May 2014 9:30 am Operator: wilfredo
Sample : cc3930-4 Inst : MSVOA4
Misc : MS27121,VB3993,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\METHODS\8260bnew.m (RTE Integrator)
Title : EPA 624 & SWA 5030B/8260B
Last Update : Tue Feb 25 11:32:48 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	93	0.00	9.90
2	Dichlorodifluoromethane	0.337	0.358	-6.2	91	0.00	4.39
3 P	Chloromethane	0.522	0.492	5.7	86	0.03	4.69
4 C	Vinyl Chloride	0.371	0.345	7.0	85	0.02	4.92
		Amount	Calc.	%Drift			
5	Bromomethane	40.000	47.384	-18.5	96	0.02	5.48
6	Chloroethane	40.000	42.387	-6.0	95	0.00	5.62
		AvgRF	CCRF	%Dev			
7	Trichlorofluoromethane	0.407	0.491	-20.6#	107	-0.01	6.00
8	Ethyl Ether	0.372	0.342	8.1	86	0.00	6.32
9	1,2-Dichlorotrifluoroetha	0.361	0.369	-2.2	91	0.01	6.30
10	Freon 113	0.244	0.257	-5.3	97	0.01	6.69
11 C	1,1-Dichloroethene	0.592	0.596	-0.7	91	0.00	6.69
		Amount	Calc.	%Drift			
12	Acetone	200.000	344.044	-72.0#	152	0.00	6.67
		AvgRF	CCRF	%Dev			
13	Iodomethane	0.334	0.345	-3.3	96	0.00	6.93
14	Carbon Disulfide	0.880	0.876	0.5	90	0.00	7.07
15	Methyl acetate	0.460	0.437	5.0	88	0.00	7.06
		Amount	Calc.	%Drift			
16	Methylene Chloride	40.000	38.929	2.7	85	0.00	7.24
		AvgRF	CCRF	%Dev			
17	Methyl Tert Butyl Ether	0.865	0.841	2.8	93	0.00	7.55
18	trans-1,2-Dichloroethene	0.623	0.605	2.9	91	0.00	7.58
19	Acrylonitrile	0.210	0.184	12.4	84	0.00	7.47
20	Hexane	0.662	0.685	-3.5	93	0.00	7.87
21	Di-isopropyl ether	1.820	1.867	-2.6	94	0.00	8.04
22	Vinyl acetate	1.078	0.883	18.1	74	0.00	8.00
23 P	1,1-Dichloroethane	0.690	0.661	4.2	90	0.00	8.05
24	ETBE	1.412	1.419	-0.5	94	0.00	8.44
		Amount	Calc.	%Drift			
25	2-Butanone	200.000	212.873	-6.4	89	0.00	8.63
		AvgRF	CCRF	%Dev			
26	2,2-Dichloropropane	0.420	0.477	-13.6	105	0.00	8.71

Continuing Calibration Summary

Job Number: FA14479 **Sample:** VB3993-CC3930
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** B098097.D
Project: Melrose Air Force Range, NM

27		cis-1,2-Dichloroethene	0.301	0.274	9.0	86	0.00	8.68
28		Bromochloromethane	0.120	0.115	4.2	90	0.00	8.94
29		Tetrahydrofuran	0.158	0.133	15.8	78	0.00	9.00
30	C	Chloroform	0.548	0.519	5.3	90	0.00	8.97
			Amount	Calc.	%Drift			
31	S	Dibromofluoromethane	50.000	49.078	1.8	91	0.00	9.14
			AvgRF	CCRF	%Dev			
32		1,1,1-Trichloroethane	0.446	0.483	-8.3	98	0.00	9.26
33		Cyclohexane	0.796	0.836	-5.0	92	0.00	9.36
34		Carbon Tetrachloride	0.320	0.366	-14.4	104	0.00	9.46
35		1,1-Dichloropropene	0.383	0.375	2.1	91	0.00	9.41
			Amount	Calc.	%Drift			
36	S	1,2-Dichloroethane-d4	50.000	51.470	-2.9	98	0.00	9.54
			AvgRF	CCRF	%Dev			
37		TAME	0.861	0.821	4.6	88	0.00	9.67
38		Benzene	1.100	1.028	6.5	86	0.00	9.65
39		1,2-Dichloroethane	0.614	0.603	1.8	93	0.00	9.62
40		Trichloroethene	0.282	0.273	3.2	90	0.00	10.29
41		Methylcyclohexane	0.451	0.467	-3.5	93	0.00	10.55
42	C	1,2-Dichloropropane	0.396	0.370	6.6	87	0.00	10.53
43		Dibromomethane	0.192	0.177	7.8	85	0.00	10.66
44		Bromodichloromethane	0.401	0.412	-2.7	94	0.00	10.77
			Amount	Calc.	%Drift			
45		2-Chloroethyl vinyl ether	200.000	184.466	7.8	77	0.00	10.99
			AvgRF	CCRF	%Dev			
46		2-Nitropropane	0.126	0.132	-4.8	86	0.00	10.96
47		cis-1,3-Dichloropropene	0.484	0.487	-0.6	91	0.00	11.22
48		4-Methyl-2-pentanone	0.505	0.456	9.7	83	0.00	11.32
49	I	Chlorobenzene-d5	1.000	1.000	0.0	94	0.00	13.12
50	S	Toluene-d8	1.394	1.462	-4.9	95	0.00	11.55
51	C	Toluene	1.814	1.694	6.6	92	0.00	11.63
52		trans-1,3-Dichloropropene	0.665	0.662	0.5	90	0.00	11.77
53		1,1,2-Trichloroethane	0.363	0.319	12.1	83	0.00	11.99
54		Tetrachloroethene	0.326	0.338	-3.7	96	0.00	12.24
55		2-hexanone	0.544	0.607	-11.6	99	0.00	12.17
56		1,3-Dichloropropane	0.693	0.630	9.1	86	0.00	12.19
57		Dibromochloromethane	0.368	0.369	-0.3	90	0.00	12.47
58		1,2-Dibromoethane	0.378	0.353	6.6	87	0.00	12.64
59		1-Chlorohexane	0.583	0.628	-7.7	95	0.00	13.01
60	P	Chlorobenzene	0.945	0.928	1.8	93	0.00	13.15
61	C	Ethylbenzene	2.005	1.960	2.2	91	0.00	13.22
62		1,1,1,2-Tetrachloroethane	0.334	0.345	-3.3	95	0.00	13.21
63		m,p-Xylene	1.475	1.505	-2.0	94	0.00	13.34
64		o-Xylene	1.510	1.500	0.7	92	0.00	13.79
65		Styrene	1.104	1.078	2.4	89	0.00	13.79
66	P	Bromoform	0.242	0.232	4.1	83	0.00	14.05
67	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	99	0.00	15.65
68		Isopropylbenzene	3.205	3.228	-0.7	96	0.00	14.16
			Amount	Calc.	%Drift			
69		Cyclohexanone	200.000	247.449	-23.7#	125	0.00	14.31
70	S	4-Bromofluorobenzene	50.000	45.898	8.2	92	0.00	14.36

Continuing Calibration Summary

Job Number: FA14479 **Sample:** VB3993-CC3930
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** B098097.D
Project: Melrose Air Force Range, NM

			AvgRF	CCRF	%Dev			
71	P	1,1,2,2-Tetrachloroethane	1.216	0.985	19.0	79	0.00	14.43
72		trans-1,4-Dichloro-2-Bute	0.599	0.400	33.2#	61	0.00	14.49
73		n-Propylbenzene	4.459	4.412	1.1	94	0.00	14.61
74		Bromobenzene	0.845	0.800	5.3	94	0.00	14.59
75		1,2,3-Trichloropropane	0.280	0.234	16.4	83	0.00	14.52
76		1,3,5-Trimethylbenzene	3.046	2.982	2.1	93	0.00	14.78
77		2-Chlorotoluene	3.201	3.022	5.6	92	0.00	14.77
78		4-Chlorotoluene	2.977	2.827	5.0	94	0.00	14.87
79		tert-Butylbenzene	2.030	1.980	2.5	93	0.00	15.17
80		1,2,4-Trimethylbenzene	3.136	3.081	1.8	94	0.00	15.21
81		sec-Butylbenzene	3.572	3.624	-1.5	95	0.00	15.41
82		4-Isopropyltoluene	2.732	2.861	-4.7	101	0.00	15.53
83		1,3-Dichlorobenzene	1.407	1.358	3.5	97	0.00	15.60
84		1,4-Dichlorobenzene	1.552	1.465	5.6	95	0.00	15.68
			Amount	Calc.	%Drift			
85		Benzyl Chloride	40.000	37.382	6.5	93	0.00	15.79
			AvgRF	CCRF	%Dev			
86		n-Butylbenzene	3.704	3.772	-1.8	94	0.00	15.99
87		1,2-Dichlorobenzene	1.396	1.318	5.6	93	0.00	16.12
88		1,2-Dibromo-3-Chloropropa	0.229	0.192	16.2	84	0.00	16.93
89		1,2,4-Trichlorobenzene	1.099	1.180	-7.4	105	0.00	17.91
90		Hexachlorobutadiene	0.611	0.671	-9.8	109	0.00	18.07
91		Naphthalene	2.805	2.670	4.8	91	0.00	18.25
92		1,2,3-Trichlorobenzene	1.025	1.070	-4.4	103	0.00	18.54
93	I	Tert Butyl alcohol-d10	1.000	1.000	0.0	87	0.00	7.15
94		Acrolein	3.535	3.199	9.5	76	0.00	6.50
95		Tert-Butyl Alcohol	1.454	1.461	-0.5	88	0.00	7.25
96		Tert amyl alcohol	1.167	1.182	-1.3	82	0.00	9.45
97		1,4-Dioxane	0.081	0.082	-1.2	90	0.00	10.62

(#) = Out of Range SPCC's out = 0 CCC's out = 0
B096430.D 8260bnew.m Fri May 02 11:22:05 2014

Southeast ACCUTEST LABORATORIES

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP51470-MB	Q5005.D	1	05/09/14	MRE	05/02/14	OP51470	SQ163

The QC reported here applies to the following samples: **Method:** SW846 6850

FA14479-1

CAS No.	Compound	Result	RL	MDL	Units	Q
14797-73-0	Perchlorate	ND	0.20	0.040	ug/l	

Blank Spike Summary

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP51470-BS	Q5004.D	1	05/09/14	MRE	05/02/14	OP51470	SQ163

The QC reported here applies to the following samples: **Method:** SW846 6850

FA14479-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
14797-73-0	Perchlorate	0.2	0.19	95	80-120

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP51470-MS	Q5007.D	1	05/09/14	MRE	05/02/14	OP51470	SQ163
OP51470-MSD	Q5008.D	1	05/09/14	MRE	05/02/14	OP51470	SQ163
FA14479-1	Q5006.D	1	05/09/14	MRE	05/02/14	OP51470	SQ163

The QC reported here applies to the following samples: **Method:** SW846 6850

FA14479-1

CAS No.	Compound	FA14479-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
14797-73-0	Perchlorate	2.7		0.2	3.0	150* [a]	0.2	3.0	150* [a]	0	80-120/15

(a) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Check Std:	SQ163-CC132	**Injection Date:**	05/09/14
Lab File ID:	Q5001.D	**Injection Time:**	15:22
Instrument ID:	GCMSQ	**Method:**	SW846 6850

	IS 1 AREA	RT
Initial Cal [a]	36693	10.58
Check Std [b]	31026	10.90
Upper Limit [c]	55040	12.90
Lower Limit [d]	18347	8.90

Lab Sample ID	IS 1 AREA	RT
OP51470-BS	29719	10.87
OP51470-MB	29696	10.87
FA14479-1	25128	10.13
OP51470-MS	25071	10.16
OP51470-MSD	25742	10.14
SQ163-ECC132	34202	10.87
SQ163-ECC132	29935	10.87

IS 1 = Cl18O4 (ISTD)

(a) Initial Cal is: SQ132-ICC132 Q4295.D 02/20/14 13:20. Area is AVERAGE of initial cal points.
(b) Check Std Limit = -50 to + 50% of initial cal area.
(c) Upper Limit = + 50% of initial standard area; Retention time + 2 minutes of check standard.
(d) Lower Limit = -50% of initial standard area; Retention time -2 minutes of check standard.

Initial Calibration Summary

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM
Sample: SQ132-ICC132
Lab FileID: Q4295.D

Initial Calibration ReSponse Factors - D:\MassHunter\0220PERC_SQ132.batch.bin

Level ID : Calibration File
1 : D:\MassHunter\Q4292.d
2 : D:\MassHunter\Q4293.d
3 : D:\MassHunter\Q4294.d
4 : D:\MassHunter\Q4295.d
5 : D:\MassHunter\Q4296.d
6 : D:\MassHunter\Q4297.d
7 : D:\MassHunter\Q4298.d
8 : D:\MassHunter\Q4299.d

Compound	1	2	3	4	5	6	7	8	AvgRF	%RSD	r
1) Cl18O4	----------ISTD----------										
3) Perchlorate	1.0662	1.0597	1.0552	1.0486	1.0565	1.0822	1.0851	1.0832	1.0671	1.355	1.0000

*(value) - Average RF below (value)

7.5.1

7

Initial Calibration Verification

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM
Sample: SQ132-ICV132
Lab FileID: Q4300.D

Continuing Calibration Response Factors - D:\MassHunter\0220PERC_SQ132.batch.bin

Level Calibration File
1 : D:\MassHunter\Q4300.d

Compound	Amount	Calc.	Rec%
1) Cl18O4		ISTD	
2) Perchlorate	2.00	2.151	107.6

* - Recovery Outside of Limits

Continuing Calibration Summary

Job Number: FA14479 **Sample:** SQ163-CC132
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** Q5001.D
Project: Melrose Air Force Range, NM

Continuing Calibration Report

Batch: D:\MassHunter\Data\0509_PERC_SQ163\SQ163.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Q4292.d
2:D:\MassHunter\Q4293.d
3:D:\MassHunter\Q4294.d
4:D:\MassHunter\Q4295.d
5:D:\MassHunter\Q4296.d
6:D:\MassHunter\Q4297.d
7:D:\MassHunter\Q4298.d
8:D:\MassHunter\Q4299.d

Data File: Q5001
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	2.000	1.860	-7.0	93.0

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA14479 **Sample:** SQ163-CC132
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** Q5002.D
Project: Melrose Air Force Range, NM

Continuing Calibration Report

Batch: D:\MassHunter\Data\0509_PERC_SQ163\SQ163.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Q4292.d
2:D:\MassHunter\Q4293.d
3:D:\MassHunter\Q4294.d
4:D:\MassHunter\Q4295.d
5:D:\MassHunter\Q4296.d
6:D:\MassHunter\Q4297.d
7:D:\MassHunter\Q4298.d
8:D:\MassHunter\Q4299.d

Data File: Q5002
Type : QC
Level : 1

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	0.200	0.187	-6.3	93.7

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA14479 **Sample:** SQ163-ECC132
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** Q5009.D
Project: Melrose Air Force Range, NM

Continuing Calibration Report

Batch: D:\MassHunter\Data\0509_PERC_SQ163\SQ163.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Q4292.d
2:D:\MassHunter\Q4293.d
3:D:\MassHunter\Q4294.d
4:D:\MassHunter\Q4295.d
5:D:\MassHunter\Q4296.d
6:D:\MassHunter\Q4297.d
7:D:\MassHunter\Q4298.d
8:D:\MassHunter\Q4299.d

Data File: Q5009
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	2.000	1.867	-6.7	93.3

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA14479 **Sample:** SQ163-ECC132
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** Q5010.D
Project: Melrose Air Force Range, NM

Continuing Calibration Report

Batch: D:\MassHunter\Data\0509_PERC_SQ163\SQ163.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Q4292.d
2:D:\MassHunter\Q4293.d
3:D:\MassHunter\Q4294.d
4:D:\MassHunter\Q4295.d
5:D:\MassHunter\Q4296.d
6:D:\MassHunter\Q4297.d
7:D:\MassHunter\Q4298.d
8:D:\MassHunter\Q4299.d

Data File: Q5010
Type : QC
Level : 1

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	0.200	0.185	-7.4	92.6

CC Criteria: +/- 15%

Southeast ACCUTEST LABORATORIES

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP51394-MB	BB041609.D	1	04/29/14	KL	04/28/14	OP51394	GBB1089

The QC reported here applies to the following samples: **Method:** SW846 8330A

FA14479-1

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	0.20	0.080	ug/l	
121-82-4	RDX	ND	0.20	0.085	ug/l	
99-65-0	1,3-Dinitrobenzene	ND	0.20	0.080	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.20	0.080	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.20	0.085	ug/l	
35572-78-2	2-amino-4,6-Dinitrotoluene	ND	0.20	0.080	ug/l	
19406-51-0	4-amino-2,6-Dinitrotoluene	ND	0.20	0.099	ug/l	
98-95-3	Nitrobenzene	ND	0.20	0.081	ug/l	
88-72-2	o-Nitrotoluene	ND	0.20	0.089	ug/l	
99-08-1	m-Nitrotoluene	ND	0.20	0.080	ug/l	
99-99-0	p-Nitrotoluene	ND	0.20	0.080	ug/l	
479-45-8	Tetryl	ND	0.20	0.080	ug/l	
99-35-4	1,3,5-Trinitrobenzene	ND	0.20	0.080	ug/l	
118-96-7	2,4,6-Trinitrotoluene	ND	0.20	0.080	ug/l	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	117%	70-136%

Method Blank Summary

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP51394-MB	BB041677.D	1	05/01/14	KL	04/28/14	OP51394	GBB1091

The QC reported here applies to the following samples: **Method:** SW846 8330A

FA14479-1

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	0.20	0.080	ug/l	
121-82-4	RDX	ND	0.20	0.085	ug/l	
99-65-0	1,3-Dinitrobenzene	ND	0.20	0.080	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.20	0.080	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.20	0.085	ug/l	
35572-78-2	2-amino-4,6-Dinitrotoluene	ND	0.20	0.080	ug/l	
19406-51-0	4-amino-2,6-Dinitrotoluene	ND	0.20	0.099	ug/l	
98-95-3	Nitrobenzene	ND	0.20	0.081	ug/l	
88-72-2	o-Nitrotoluene	ND	0.20	0.089	ug/l	
99-08-1	m-Nitrotoluene	ND	0.20	0.080	ug/l	
99-99-0	p-Nitrotoluene	ND	0.20	0.080	ug/l	
479-45-8	Tetryl	ND	0.20	0.080	ug/l	
99-35-4	1,3,5-Trinitrobenzene	ND	0.20	0.080	ug/l	
118-96-7	2,4,6-Trinitrotoluene	ND	0.20	0.080	ug/l	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	102%	70-136%

Method Blank Summary

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP51394-MB	GG056024.D	1	05/02/14	KL	04/28/14	OP51394	GGG2230

The QC reported here applies to the following samples: **Method:** SW846 8330A

FA14479-1

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	0.20	0.080	ug/l	
121-82-4	RDX	ND	0.20	0.085	ug/l	
99-65-0	1,3-Dinitrobenzene	ND	0.20	0.080	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.20	0.080	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.20	0.085	ug/l	
35572-78-2	2-amino-4,6-Dinitrotoluene	ND	0.20	0.080	ug/l	
19406-51-0	4-amino-2,6-Dinitrotoluene	ND	0.20	0.099	ug/l	
98-95-3	Nitrobenzene	ND	0.20	0.081	ug/l	
88-72-2	o-Nitrotoluene	ND	0.20	0.089	ug/l	
99-08-1	m-Nitrotoluene	ND	0.20	0.080	ug/l	
99-99-0	p-Nitrotoluene	ND	0.20	0.080	ug/l	
479-45-8	Tetryl	ND	0.20	0.080	ug/l	
99-35-4	1,3,5-Trinitrobenzene	ND	0.20	0.080	ug/l	
118-96-7	2,4,6-Trinitrotoluene	ND	0.20	0.080	ug/l	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	98%	70-136%

Blank Spike Summary

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP51394-BS	BB041608.D	1	04/29/14	KL	04/28/14	OP51394	GBB1089

The QC reported here applies to the following samples: **Method:** SW846 8330A

FA14479-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
2691-41-0	HMX	5	5.1	102	77-144
121-82-4	RDX	5	4.9	98	77-125
99-65-0	1,3-Dinitrobenzene	5	4.8	96	79-122
606-20-2	2,6-Dinitrotoluene	5	5.1	102	81-131
121-14-2	2,4-Dinitrotoluene	5	5.0	100	80-123
35572-78-2	2-amino-4,6-Dinitrotoluene	5	4.9	98	81-120
19406-51-0	4-amino-2,6-Dinitrotoluene	5	4.4	88	79-119
98-95-3	Nitrobenzene	5	4.8	96	78-130
88-72-2	o-Nitrotoluene	5	5.2	104	76-131
99-08-1	m-Nitrotoluene	5	4.9	98	78-122
99-99-0	p-Nitrotoluene	5	5.0	100	79-124
479-45-8	Tetryl	5	5.4	108	65-124
99-35-4	1,3,5-Trinitrobenzene	5	4.9	98	79-128
118-96-7	2,4,6-Trinitrotoluene	5	4.5	90	72-112

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	114%	70-136%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP51394-BS	BB041675.D	1	05/01/14	KL	04/28/14	OP51394	GBB1091

The QC reported here applies to the following samples: **Method:** SW846 8330A

FA14479-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
2691-41-0	HMX	5	5.3	106	77-144
121-82-4	RDX	5	5.1	102	77-125
99-65-0	1,3-Dinitrobenzene	5	4.9	98	79-122
606-20-2	2,6-Dinitrotoluene	5	6.2	124	81-131
121-14-2	2,4-Dinitrotoluene	5	4.9	98	80-123
35572-78-2	2-amino-4,6-Dinitrotoluene	5	5.1	102	81-120
19406-51-0	4-amino-2,6-Dinitrotoluene	5	4.6	92	79-119
98-95-3	Nitrobenzene	5	4.9	98	78-130
88-72-2	o-Nitrotoluene	5	4.7	94	76-131
99-08-1	m-Nitrotoluene	5	4.5	90	78-122
99-99-0	p-Nitrotoluene	5	4.7	94	79-124
479-45-8	Tetryl	5	4.6	92	65-124
99-35-4	1,3,5-Trinitrobenzene	5	4.9	98	79-128
118-96-7	2,4,6-Trinitrotoluene	5	4.5	90	72-112

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	105%	70-136%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP51394-MS	BB041681.D	1	05/02/14	KL	04/28/14	OP51394	GBB1091
OP51394-MSD	BB041682.D	1	05/02/14	KL	04/28/14	OP51394	GBB1091
FA14391-6 [a]	BB041680.D	1	05/02/14	KL	04/28/14	OP51394	GBB1091
FA14391-6 [b]	GG056027.D	1	05/02/14	KL	04/28/14	OP51394	GGG2230

The QC reported here applies to the following samples: **Method:** SW846 8330A

FA14479-1

CAS No.	Compound	FA14391-6 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
2691-41-0	HMX	0.19	U	9.62	10.2	106	9.62	10.6	110	4	77-144/21
121-82-4	RDX	0.19	U	9.62	10.3	107	9.62	10.3	107	0	77-125/19
99-65-0	1,3-Dinitrobenzene	0.19	U	9.62	9.5	99	9.62	9.8	102	3	79-122/17
606-20-2	2,6-Dinitrotoluene	0.19	U	9.62	11.5	120	9.62	12.9	134*	11	81-131/17
121-14-2	2,4-Dinitrotoluene	0.21		9.62	9.7	99	9.62	10.2	104	5	80-123/19
35572-78-2	2-amino-4,6-Dinitrotoluene	0.19	U	9.62	10	104	9.62	10.3	107	3	81-120/19
19406-51-0	4-amino-2,6-Dinitrotoluene	0.19	U	9.62	9.0	94	9.62	9.4	98	4	79-119/20
98-95-3	Nitrobenzene	0.19	U	9.62	9.8	102	9.62	10.0	104	2	78-130/19
88-72-2	o-Nitrotoluene	0.19	U	9.62	9.4	98	9.62	9.7	101	3	76-131/20
99-08-1	m-Nitrotoluene	0.19	U	9.62	8.9	93	9.62	9.3	97	4	78-122/18
99-99-0	p-Nitrotoluene	0.19	U	9.62	9.3	97	9.62	9.7	101	4	79-124/18
479-45-8	Tetryl	0.19	U	9.62	6.5	68	9.62	6.6	69	2	65-124/20
99-35-4	1,3,5-Trinitrobenzene	0.19	U	9.62	9.2	96	9.62	9.3	97	1	79-128/16
118-96-7	2,4,6-Trinitrotoluene	0.19	U	9.62	8.5	88	9.62	8.9	93	5	72-112/16

CAS No.	Surrogate Recoveries	MS	MSD	FA14391-6	FA14391-6	Limits
610-39-9	3,4-Dinitrotoluene	107%	109%	99%	97%	70-136%

(a) All hits confirmed by reanalysis on a dissimilar column.
(b) Confirmation run.

* = Outside of Control Limits.

Semivolatile Surrogate Recovery Summary

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Method: SW846 8330A **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
FA14479-1	BB041690.D	98
OP51394-BS	BB041608.D	114
OP51394-BS	BB041675.D	105
OP51394-MB	BB041609.D	117
OP51394-MB	BB041677.D	102
OP51394-MB	GG056024.D	98
OP51394-MS	BB041681.D	107
OP51394-MSD	BB041682.D	109

Surrogate Compounds	Recovery Limits
S1 = 3,4-Dinitrotoluene	70-136%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Check Std:	GBB1089-CC1086	**Injection Date:**	04/29/14
Lab File ID:	BB041602.D	**Injection Time:**	10:06
Instrument ID:	GCBB	**Method:**	SW846 8330A

	S1 [a] RT	S1 [b] RT
Check Std	10.80	10.81

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
FA14366-1	BB041603.D	04/29/14	10:39		10.80
OP51356-MS	BB041604.D	04/29/14	11:13		10.82
OP51356-MSD	BB041605.D	04/29/14	11:50		10.82
ZZZZZZ	BB041606.D	04/29/14	12:25		10.79
ZZZZZZ	BB041607.D	04/29/14	13:00		10.84
OP51394-BS	BB041608.D	04/29/14	13:35		10.83
OP51394-MB	BB041609.D	04/29/14	14:10		10.83
ZZZZZZ	BB041610.D	04/29/14	14:45		10.83
ZZZZZZ	BB041611.D	04/29/14	15:19		10.82
ZZZZZZ	BB041612.D	04/29/14	15:55		10.82
GBB1089-ECC1086	BB041613.D	04/29/14	16:30	10.81	10.82

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Check Std:	GGG2230-CC2227	**Injection Date:**	05/02/14
Lab File ID:	GG056023.D	**Injection Time:**	08:44
Instrument ID:	GCGG	**Method:**	SW846 8330A

	S1 [a] RT	S1 [b] RT
Check Std	16.15	16.15

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
OP51394-MB	GG056024.D	05/02/14	09:28		16.19
ZZZZZZ	GG056026.D	05/02/14	10:28		16.22
FA14391-6	GG056027.D	05/02/14	10:58		16.24
ZZZZZZ	GG056028.D	05/02/14	11:28		16.26
GGG2230-ECC2227	GG056029.D	05/02/14	11:58	16.25	16.25

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Check Std:	GBB1091-CC1091	**Injection Date:**	05/01/14
Lab File ID:	BB041673.D	**Injection Time:**	20:27
Instrument ID:	GCBB	**Method:**	SW846 8330A

	S1 [a] **RT**
Check Std	10.98

Lab Sample ID	**Lab File ID**	**Date Analyzed**	**Time Analyzed**	**S1** [a] **RT**
OP51394-BS	BB041675.D	05/01/14	21:37	10.98
OP51394-MB	BB041677.D	05/01/14	22:46	10.98
ZZZZZZ	BB041678.D	05/01/14	23:21	10.97
ZZZZZZ	BB041679.D	05/01/14	23:56	10.97
FA14391-6	BB041680.D	05/02/14	00:31	10.97
OP51394-MS	BB041681.D	05/02/14	01:06	10.96
OP51394-MSD	BB041682.D	05/02/14	01:41	10.96
ZZZZZZ	BB041683.D	05/02/14	02:16	10.96
ZZZZZZ	BB041684.D	05/02/14	02:51	10.95

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Check Std:	GBB1091-CC1091	**Injection Date:**	05/02/14
Lab File ID:	BB041685.D	**Injection Time:**	03:26
Instrument ID:	GCBB	**Method:**	SW846 8330A

	S1 [a] RT	S1 [b] RT
Check Std	10.94	10.95

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
ZZZZZZ	BB041688.D	05/02/14	05:11		10.97
ZZZZZZ	BB041689.D	05/02/14	05:46		10.96
FA14479-1	BB041690.D	05/02/14	06:21		10.95
GBB1091-ECC1091	BB041692.D	05/02/14	07:34	10.93	10.93

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

Initial Calibration Summary

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM
Sample: GBB1086-ICC1086
Lab FileID: BB041539.D

Response Factor Report G1315B

Method : D:\MSDCHEM\1\METHODS\8330BPLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Apr 22 08:45:28 2014
Response via : Initial Calibration

Calibration Files
20 =BB041535.D 50 =BB041536.D 100 =BB041537.D 200 =BB041538.D
500 =BB041539.D 1000=BB041540.D 2000=BB041541.D

	Compound	20	50	100	200	500	1000	2000	Avg		%RSD
1)	TNX	3.060	3.398	3.273	3.087	3.093	3.029	3.120	3.151	E3	4.25
2)	HMX	1.702	1.554	1.528	1.568	1.577	1.508	1.527	1.566	E3	4.13
3)	DNX	2.967	2.787	2.817	2.786	2.762	2.671	2.801	2.799	E3	3.15
4)	MNX	2.734	2.485	2.373	2.416	2.323	2.321	2.265	2.417	E3	6.51
5)	RDX	1.865	1.905	1.914	1.854	1.796	1.783	1.805	1.846	E3	2.86
6)	1,3,5-Trinitroben	3.917	3.924	3.785	3.885	3.759	3.694	3.768	3.819	E3	2.34
7)	1,3-Dinitrobenzen	5.689	5.525	5.381	5.439	5.318	5.190	5.304	5.407	E3	3.03
8)	3,5-Dinitroanilin	4.606	4.265	4.182	4.178	4.095	4.009	4.096	4.204	E3	4.64
9)	Nitrobenzene	3.538	3.200	3.106	3.188	3.048	2.969	3.027	3.154	E3	6.00
10)	Nitroglycerin								0.000		-1.00
11)	Tetryl	2.592	2.345	2.146	2.323	2.204	2.164	2.220	2.285	E3	6.78
12)	2,4,6-Trinitrotol	3.821	3.636	3.565	3.682	3.595	3.506	3.600	3.630	E3	2.77
13)	2-Amino-4,6-Dinit	2.943	3.398	3.199	3.272	3.185	3.141	3.211	3.193	E3	4.32
14)	4-Amino-2,6-Dinit	2.783	2.597	2.608	2.601	2.537	2.463	2.559	2.593	E3	3.78
15)S	3,4-Dinitrotoluen	1.735	1.837	1.779	1.929	1.909	1.874	1.878	1.849	E3	3.79
16)	2,4-Dinitrotoluen	4.426	4.438	4.447	4.651	4.593	4.492	4.606	4.522	E3	2.05
17)	2,6-Dinitrotoluen	2.491	2.486	2.445	2.560	2.530	2.478	2.503	2.499	E3	1.49
18)	o-Nitrotoluene	2.420	2.438	2.161	2.259	2.235	2.131	2.193	2.262	E3	5.38
19)	p-Nitrotoluene	3.310	3.467	3.335	3.343	3.310	3.200	3.270	3.319	E3	2.45
20)	m-Nitrotoluene	3.450	3.325	3.239	3.378	3.358	3.192	3.232	3.310	E3	2.81
21)	PETN								0.000		-1.00

Signal #2

1)	TNX	4.768	4.775	4.775	4.812	4.713	4.645	4.796	4.755	E3	1.21
2)	HMX	4.974	4.066	4.300	4.507	4.391	4.169	4.241	4.378	E3	6.84
3)	DNX	4.839	4.745	5.042	4.615	4.426	4.311	4.553	4.647	E3	5.37
4)	MNX	3.909	3.661	3.570	3.858	3.638	3.658	3.593	3.698	E3	3.56
5)	RDX	3.065	2.763	2.965	2.989	2.895	2.852	2.920	2.921	E3	3.36
6)	1,3,5-Trinitroben	7.531	7.805	7.408	7.408	7.343	7.164	7.368	7.432	E3	2.66
7)	1,3-Dinitrobenzen	3.612	3.636	3.650	3.533	3.626	3.535	3.656	3.607	E3	1.44
8)	3,5-Dinitroanilin	7.355	7.094	6.975	7.051	6.875	6.771	6.929	7.007	E3	2.68
9)	Nitrobenzene	3.246	3.226	2.933	2.938	2.943	2.894	2.929	3.015	E3	5.03
10)	Nitroglycerin	1.320	1.301	1.282	1.313	1.265	1.239	1.270	1.284	E3	2.27
11)	Tetryl	4.155	3.659	3.615	3.718	3.495	3.531	3.637	3.687	E3	5.96
12)	2,4,6-Trinitrotol	4.582	4.295	4.513	4.605	4.447	4.354	4.483	4.468	E3	2.54
13)	2-Amino-4,6-Dinit	4.845	5.161	4.983	5.197	4.961	4.851	4.968	4.995	E3	2.75
14)	4-Amino-2,6-Dinit	4.437	5.453	5.614	5.299	5.262	5.139	5.273	5.211	E3	7.18
15)S	3,4-Dinitrotoluen	3.079	3.759	3.351	3.622	3.465	3.456	3.228	3.423	E3	6.71
16)	2,4-Dinitrotoluen	3.496	3.293	3.012	3.119	3.089	3.187	3.125	3.189	E3	5.04
17)	2,6-Dinitrotoluen	4.129	3.873	3.247	3.714	3.458	3.445	3.469	3.619	E3	8.37
18)	o-Nitrotoluene	3.599	3.019	3.352	3.181	3.164	3.025	3.041	3.197	E3	6.67
19)	p-Nitrotoluene	3.284	2.701	3.034	3.089	2.983	2.895	2.894	2.983	E3	6.12
20)	m-Nitrotoluene	3.986	3.666	3.674	4.207	4.069	3.941	3.945	3.927	E3	5.04
21)	PETN	1.789	2.479	1.987	2.040	1.898	1.864	1.908	1.995	E3	11.45

(#) = Out of Range

Initial Calibration Summary

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Sample: GBB1086-ICC1086
Lab FileID: BB041539.D

8330BPLUS.M Tue Apr 22 09:03:32 2014

Initial Calibration Verification

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM
Sample: GBB1086-ICV1086
Lab FileID: BB041542.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0421BPL\BB041542.D\dad1B.ch Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\0421BPL\BB041542.D\dad1A.ch
Acq On : 21-Apr-2014, 17:05:08 Operator: kismetl
Sample : icv1086-500 Inst : G1315B
Misc : OP51284,GBB1086,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330BPLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Apr 22 08:45:28 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	500.000	495.307	0.9	101	0.00	1.09- 1.69
2	HMX	500.000	541.071	-8.2	107	0.00	1.22- 1.82
3	DNX	500.000	490.030	2.0	99	0.00	1.47- 2.07
4	MNX	500.000	482.481	3.5	100	0.00	2.06- 2.66
5	RDX	500.000	503.755	-0.8	104	0.00	2.55- 3.35
6	1,3,5-Trinitrobenzene	500.000	539.604	-7.9	110	0.00	4.23- 5.03
7	1,3-Dinitrobenzene	500.000	497.135	0.6	101	0.00	5.47- 6.27
8	3,5-Dinitroaniline	500.000	510.566	-2.1	105	0.00	5.94- 6.74
9	Nitrobenzene	500.000	510.608	-2.1	106	0.00	6.98- 7.78
10	Nitroglycerin		----------NA----------				
11	Tetryl	500.000	578.209	-15.6#	120	0.00	8.91- 9.71
12	2,4,6-Trinitrotoluene	500.000	466.109	6.8	94	0.00	9.29-10.09
13	2-Amino-4,6-Dinitrotol	500.000	522.423	-4.5	105	0.00	9.77-10.57
14	4-Amino-2,6-Dinitrotol	500.000	461.619	7.7	94	-0.01	10.21-11.01
15 S	3,4-Dinitrotoluene		----------NA----------				
16	2,4-Dinitrotoluene	500.000	526.119	-5.2	104	0.00	11.14-11.94
17	2,6-Dinitrotoluene	500.000	535.886	-7.2	106	0.00	11.60-12.40
18	o-Nitrotoluene	500.000	529.495	-5.9	107	0.00	15.27-16.15
19	p-Nitrotoluene	500.000	521.985	-4.4	105	-0.01	16.05-17.05
20	m-Nitrotoluene	500.000	508.592	-1.7	100	0.00	17.49-18.49
21	PETN		----------NA----------				
*****	Signal #2 *****						
1	TNX	500.000	506.792	-1.4	102	0.00	1.09- 1.69
2	HMX	500.000	555.030	-11.0	111	0.00	1.22- 1.82
3	DNX	500.000	491.680	1.7	103	0.00	1.47- 2.07
4	MNX	500.000	508.439	-1.7	103	0.00	2.06- 2.66
5	RDX	500.000	512.216	-2.4	103	0.00	2.55- 3.35
6	1,3,5-Trinitrobenzene	500.000	543.520	-8.7	110	0.00	4.23- 5.03
7	1,3-Dinitrobenzene	500.000	507.847	-1.6	101	0.00	5.47- 6.27
8	3,5-Dinitroaniline	500.000	519.388	-3.9	106	0.00	5.93- 6.73
9	Nitrobenzene	500.000	520.343	-4.1	107	0.00	6.98- 7.78
10	Nitroglycerin	2500.000	2497.629	0.1	101	0.00	8.44- 9.44
11	Tetryl	500.000	584.972	-17.0#	123	0.00	8.91- 9.71
12	2,4,6-Trinitrotoluene	500.000	476.250	4.8	96	0.00	9.29-10.09
13	2-Amino-4,6-Dinitrotol	500.000	523.521	-4.7	105	0.00	9.77-10.57
14	4-Amino-2,6-Dinitrotol	500.000	475.367	4.9	94	-0.01	10.21-11.01
15 S	3,4-Dinitrotoluene		----------NA----------				
16	2,4-Dinitrotoluene	500.000	506.201	-1.2	105	0.00	11.14-11.94
17	2,6-Dinitrotoluene	500.000	489.076	2.2	102	-0.01	11.60-12.40

Initial Calibration Verification

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Sample: GBB1086-ICV1086
Lab FileID: BB041542.D

18	o-Nitrotoluene	500.000	511.993	-2.4	103	-0.02	15.15-16.15
19	p-Nitrotoluene	500.000	517.310	-3.5	103	0.00	16.05-17.05
20	m-Nitrotoluene	500.000	525.783	-5.2	101	0.00	17.49-18.49
21	PETN	2500.000	1886.777	24.5#	79	0.00	23.49-25.46

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB041539.D 8330BPLUS.M Tue Apr 22 09:04:00 2014

Continuing Calibration Summary

Job Number: FA14479 **Sample:** GBB1089-CC1086
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** BB041602.D
Project: Melrose Air Force Range, NM

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0429BPL\BB041602.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\0429BPL\BB041602.D\dad1A.ch
Acq On : 29-Apr-2014, 10:06:24 Operator: kismetl
Sample : cc1086-1000 Inst : G1315B
Misc : OP51356,GBB1089,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330BPLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Apr 30 07:31:47 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	947.672	5.2	99	0.00	1.08- 1.68
2	HMX	1000.000	947.106	5.3	98	0.00	1.21- 1.81
3	DNX	1000.000	942.938	5.7	99	0.00	1.46- 2.06
4	MNX	1000.000	921.988	7.8	96	0.00	2.04- 2.64
5	RDX	1000.000	953.044	4.7	99	0.00	2.53- 3.33
6	1,3,5-Trinitrobenzene	1000.000	956.656	4.3	99	0.00	4.21- 5.01
7	1,3-Dinitrobenzene	1000.000	954.919	4.5	99	0.00	5.44- 6.24
8	3,5-Dinitroaniline	1000.000	948.659	5.1	99	0.00	5.88- 6.68
9	Nitrobenzene	1000.000	927.298	7.3	99	0.00	6.94- 7.74
10	Nitroglycerin		----------NA----------				
11	Tetryl	1000.000	970.802	2.9	102	0.00	8.85- 9.65
12	2,4,6-Trinitrotoluene	1000.000	959.902	4.0	99	0.00	9.24-10.04
13	2-Amino-4,6-Dinitrotol	1000.000	970.712	2.9	99	0.00	9.68-10.48
14	4-Amino-2,6-Dinitrotol	1000.000	910.256	9.0	96	0.00	10.11-10.91
15 S	3,4-Dinitrotoluene	1000.000	1071.285	-7.1	106	0.00	10.41-11.21
16	2,4-Dinitrotoluene	1000.000	989.638	1.0	100	0.00	11.07-11.87
17	2,6-Dinitrotoluene	1000.000	987.227	1.3	100	0.00	11.52-12.32
18	o-Nitrotoluene	1000.000	926.576	7.3	98	0.00	15.16-16.03
19	p-Nitrotoluene	1000.000	957.697	4.2	99	0.00	15.93-16.93
20	m-Nitrotoluene	1000.000	936.871	6.3	97	0.00	17.36-18.36
21	PETN		----------NA----------				

***** Signal #2 *****

1	TNX	1000.000	965.789	3.4	99	0.00	1.08- 1.68
2	HMX	1000.000	947.201	5.3	99	0.00	1.21- 1.81
3	DNX	1000.000	943.699	5.6	102	0.00	1.46- 2.06
4	MNX	1000.000	957.117	4.3	97	0.00	2.04- 2.64
5	RDX	1000.000	970.914	2.9	99	0.00	2.53- 3.33
6	1,3,5-Trinitrobenzene	1000.000	960.249	4.0	100	0.00	4.21- 5.01
7	1,3-Dinitrobenzene	1000.000	979.041	2.1	100	0.00	5.44- 6.24
8	3,5-Dinitroaniline	1000.000	958.230	4.2	99	0.00	5.88- 6.68
9	Nitrobenzene	1000.000	934.149	6.6	97	0.00	6.94- 7.74
10	Nitroglycerin	5000.000	4801.877	4.0	100	0.00	8.40- 9.40
11	Tetryl	1000.000	938.352	6.2	98	0.00	8.84- 9.64
12	2,4,6-Trinitrotoluene	1000.000	965.351	3.5	99	0.00	9.24-10.04
13	2-Amino-4,6-Dinitrotol	1000.000	952.761	4.7	98	0.00	9.67-10.47
14	4-Amino-2,6-Dinitrotol	1000.000	953.592	4.6	97	0.00	10.11-10.91
15 S	3,4-Dinitrotoluene	1000.000	1047.641	-4.8	104	0.00	10.40-11.20
16	2,4-Dinitrotoluene	1000.000	936.276	6.4	94	0.00	11.06-11.86
17	2,6-Dinitrotoluene	1000.000	939.007	6.1	99	0.00	11.52-12.32

Continuing Calibration Summary

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Sample: GBB1089-CC1086
Lab FileID: BB041602.D

18	o-Nitrotoluene	1000.000	922.448	7.8	98	0.00	15.04-16.04
19	p-Nitrotoluene	1000.000	939.546	6.0	97	0.00	15.94-16.94
20	m-Nitrotoluene	1000.000	966.228	3.4	96	0.00	17.36-18.36
21	PETN	5000.000	4467.509	10.6	96	-0.01	23.41-25.38

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB041540.D 8330BPLUS.M Wed Apr 30 08:01:55 2014

Continuing Calibration Summary

Job Number: FA14479 **Sample:** GBB1089-ECC1086
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** BB041613.D
Project: Melrose Air Force Range, NM

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0429BPL\BB041613.D\dad1B.ch Vial: 31
Signal #2 : C:\HPCHEM\1\DATA\0429BPL\BB041613.D\dad1A.ch
Acq On : 29-Apr-2014, 16:30:03 Operator: kismetl
Sample : ecc1086-1000 Inst : G1315B
Misc : OP51356,GBB1089,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330BPLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Apr 30 07:31:47 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	966.429	3.4	101	0.00	1.08- 1.68
2	HMX	1000.000	986.648	1.3	102	0.00	1.21- 1.81
3	DNX	1000.000	989.962	1.0	104	0.00	1.46- 2.06
4	MNX	1000.000	925.751	7.4	96	0.00	2.04- 2.64
5	RDX	1000.000	971.525	2.8	101	0.00	2.53- 3.33
6	1,3,5-Trinitrobenzene	1000.000	964.713	3.5	100	0.00	4.21- 5.01
7	1,3-Dinitrobenzene	1000.000	966.311	3.4	101	0.00	5.44- 6.24
8	3,5-Dinitroaniline	1000.000	959.464	4.1	101	0.00	5.88- 6.68
9	Nitrobenzene	1000.000	944.790	5.5	100	0.00	6.94- 7.74
10	Nitroglycerin		----------NA----------				
11	Tetryl	1000.000	1003.928	-0.4	106	0.00	8.85- 9.65
12	2,4,6-Trinitrotoluene	1000.000	984.413	1.6	102	0.01	9.24-10.04
13	2-Amino-4,6-Dinitrotol	1000.000	991.019	0.9	101	0.00	9.68-10.48
14	4-Amino-2,6-Dinitrotol	1000.000	929.100	7.1	98	0.00	10.11-10.91
15 S	3,4-Dinitrotoluene	1000.000	1088.534	-8.9	107	0.01	10.41-11.21
16	2,4-Dinitrotoluene	1000.000	999.509	0.0	101	0.00	11.07-11.87
17	2,6-Dinitrotoluene	1000.000	1015.010	-1.5	102	0.00	11.52-12.32
18	o-Nitrotoluene	1000.000	963.791	3.6	102	0.02	15.16-16.03
19	p-Nitrotoluene	1000.000	982.792	1.7	102	0.00	15.93-16.93
20	m-Nitrotoluene	1000.000	979.441	2.1	102	0.02	17.36-18.36
21	PETN		----------NA----------				

***** Signal #2 *****

1	TNX	1000.000	983.460	1.7	101	0.00	1.08- 1.68
2	HMX	1000.000	979.329	2.1	103	0.00	1.21- 1.81
3	DNX	1000.000	959.389	4.1	103	0.00	1.46- 2.06
4	MNX	1000.000	940.225	6.0	95	0.00	2.04- 2.64
5	RDX	1000.000	979.195	2.1	100	0.00	2.53- 3.33
6	1,3,5-Trinitrobenzene	1000.000	973.228	2.7	101	0.00	4.21- 5.01
7	1,3-Dinitrobenzene	1000.000	982.467	1.8	100	0.00	5.44- 6.24
8	3,5-Dinitroaniline	1000.000	967.841	3.2	100	0.00	5.88- 6.68
9	Nitrobenzene	1000.000	961.322	3.9	100	0.00	6.94- 7.74
10	Nitroglycerin	5000.000	4951.912	1.0	103	0.01	8.40- 9.40
11	Tetryl	1000.000	936.839	6.3	98	0.00	8.84- 9.64
12	2,4,6-Trinitrotoluene	1000.000	985.393	1.5	101	0.00	9.24-10.04
13	2-Amino-4,6-Dinitrotol	1000.000	969.653	3.0	100	0.00	9.67-10.47
14	4-Amino-2,6-Dinitrotol	1000.000	970.592	2.9	98	0.00	10.11-10.91
15 S	3,4-Dinitrotoluene	1000.000	1007.467	-0.7	100	0.00	10.40-11.20
16	2,4-Dinitrotoluene	1000.000	960.870	3.9	96	0.00	11.06-11.86
17	2,6-Dinitrotoluene	1000.000	953.413	4.7	100	0.00	11.52-12.32

Continuing Calibration Summary

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM
Sample: GBB1089-ECC1086
Lab FileID: BB041613.D

18	o-Nitrotoluene	1000.000	962.928	3.7	102	0.00	15.04-16.04
19	p-Nitrotoluene	1000.000	971.890	2.8	100	0.00	15.94-16.94
20	m-Nitrotoluene	1000.000	997.163	0.3	99	0.02	17.36-18.36
21	PETN	5000.000	4761.785	4.8	102	0.01	23.41-25.38

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB041540.D 8330BPLUS.M Wed Apr 30 08:01:56 2014

Initial Calibration Summary

Job Number: FA14479 **Sample:** GBB1091-ICC1091
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** BB041658.D
Project: Melrose Air Force Range, NM

Response Factor Report G1315B

Method : D:\MSDCHEM\1\METHODS\8330BPLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 01 13:21:13 2014
Response via : Initial Calibration

Calibration Files
20 =BB041654.D 50 =BB041655.D 100 =BB041656.D 200 =BB041657.D
500 =BB041658.D 1000=BB041659.D 2000=BB041660.D

	Compound	20	50	100	200	500	1000	2000	Avg		%RSD
1)	TNX	3.183	2.276	3.058	3.113	3.011	2.953	3.095	2.956	E3	10.44
2)	HMX	1.801	1.142	1.543	1.495	1.495	1.476	1.532	1.498	E3	12.85
3)	DNX	2.505	2.159	2.795	2.865	2.735	2.680	2.787	2.647	E3	9.22
4)	MNX	2.570	1.767	2.457	2.451	2.307	2.268	2.358	2.311	E3	11.28
5)	RDX	1.796	1.293	1.775	1.897	1.766	1.727	1.823	1.725	E3	11.47
6)	1,3,5-Trinitroben	3.925	3.022	3.777	3.902	3.757	3.697	3.875	3.708	E3	8.46
7)	1,3-Dinitrobenzen	5.537	5.623	5.101	5.423	5.191	5.124	5.349	5.336	E3	3.84
8)	3,5-Dinitroanilin	3.954	3.229	4.287	4.344	4.153	4.024	4.228	4.031	E3	9.42
9)	Nitrobenzene	2.788	3.022	3.239	3.066	3.083	2.959	3.051	3.030	E3	4.51
10)	Nitroglycerin								0.000		-1.00
11)	Tetryl	2.502	1.850	2.392	2.445	2.515	2.496	2.618	2.403	E3	10.54
12)	2,4,6-Trinitrotol	4.052	2.838	3.389	3.480	3.575	3.527	3.715	3.511	E3	10.45
13)	2-Amino-4,6-Dinit	3.595	2.484	2.954	3.085	3.115	3.089	3.236	3.080	E3	10.79
14)	4-Amino-2,6-Dinit	2.869	1.847	2.137	2.344	2.318	2.272	2.383	2.310	E3	13.28
15)S	3,4-Dinitrotoluen	2.080	2.149	2.051	1.990	2.034	2.004	2.132	2.063	E3	2.95
16)	2,4-Dinitrotoluen	5.078	4.890	4.607	4.449	4.444	4.370	4.595	4.633	E3	5.61
17)	2,6-Dinitrotoluen	2.754	2.890	2.735	2.593	2.607	2.501	2.630	2.673	E3	4.82
18)	o-Nitrotoluene	2.441	2.075	2.218	2.338	2.183	2.104	2.149	2.215	E3	5.93
19)	p-Nitrotoluene	3.462	3.341	3.372	3.398	3.241	3.154	3.252	3.317	E3	3.20
20)	m-Nitrotoluene	3.732	3.123	3.119	3.242	3.263	3.102	3.214	3.257	E3	6.73
21)	PETN								0.000		-1.00

Signal #2

1)	TNX	4.911	3.567	4.643	4.754	4.674	4.556	4.777	4.555	E3	9.88
2)	HMX	4.548	3.281	4.181	4.197	4.218	4.158	4.266	4.121	E3	9.54
3)	DNX	4.059	4.187	4.706	4.777	4.361	4.313	4.456	4.408	E3	5.92
4)	MNX	4.134	2.790	3.536	3.675	3.580	3.558	3.701	3.568	E3	11.19
5)	RDX	3.042	2.112	2.775	2.959	2.839	2.808	2.937	2.782	E3	11.15
6)	1,3,5-Trinitroben	7.889	5.598	7.372	7.604	7.414	7.287	7.653	7.260	E3	10.47
7)	1,3-Dinitrobenzen	3.315	3.817	3.506	3.612	3.552	3.591	3.718	3.587	E3	4.45
8)	3,5-Dinitroanilin	7.801	5.340	6.856	7.092	6.978	7.007	7.210	6.898	E3	10.91
9)	Nitrobenzene	2.865	2.837	2.888	3.032	2.912	2.858	2.922	2.902	E3	2.22
10)	Nitroglycerin	1.243	1.141	1.277	1.310	1.280	1.269	1.326	1.264	E3	4.80
11)	Tetryl	4.077	3.183	4.230	4.154	4.143	4.144	4.335	4.038	E3	9.56
12)	2,4,6-Trinitrotol	4.259	3.579	4.409	4.282	4.450	4.419	4.639	4.291	E3	7.88
13)	2-Amino-4,6-Dinit	5.576	3.745	4.868	4.868	4.854	4.828	5.056	4.828	E3	11.31
14)	4-Amino-2,6-Dinit	5.227	3.594	4.820	4.784	4.869	4.807	5.044	4.735	E3	11.15
15)S	3,4-Dinitrotoluen	3.693	3.635	3.843	3.712	3.752	3.735	3.929	3.757	E3	2.63
16)	2,4-Dinitrotoluen	3.699	3.261	3.255	3.004	2.996	2.994	3.128	3.191	E3	7.92
17)	2,6-Dinitrotoluen	3.815	3.972	3.509	3.403	3.392	3.371	3.524	3.569	E3	6.54
18)	o-Nitrotoluene	3.131	3.161	3.258	3.195	3.015	2.971	3.016	3.107	E3	3.46
19)	p-Nitrotoluene	3.573	3.332	2.987	3.041	2.851	2.804	2.858	3.064	E3	9.36
20)	m-Nitrotoluene	4.447	4.158	3.916	4.012	3.893	3.818	3.892	4.020	E3	5.43
21)	PETN	2.025	1.082	1.282	1.346	1.364	1.318	1.406	1.403	E3	20.92

---- Linear regr., Force(0,0) ---- Coefficient = 0.9990
Response Ratio = 0.00000 + 1386.79944 *A

8.6.5

8

Initial Calibration Summary

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM
Sample: GBB1091-ICC1091
Lab FileID: BB041658.D

(#) = Out of Range

8330BPLUS.M Thu May 01 14:40:24 2014

Initial Calibration Verification

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM
Sample: GBB1091-ICV1091
Lab FileID: BB041661.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0501BPL\BB041661.D\dad1B.ch Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\0501BPL\BB041661.D\dad1A.ch
Acq On : 01-May-2014, 13:25:03 Operator: kismetl
Sample : icv1091-500 Inst : G1315B
Misc : OP51356,GBB1091,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330BPLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 01 13:21:13 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	500.000	538.153	-7.6	106	0.00	1.10- 1.70
2	HMX	500.000	554.104	-10.8	111	0.00	1.23- 1.83
3	DNX	500.000	544.058	-8.8	105	0.00	1.49- 2.09
4	MNX	500.000	530.614	-6.1	106	0.00	2.08- 2.68
5	RDX	500.000	523.370	-4.7	102	0.00	2.59- 3.39
6	1,3,5-Trinitrobenzene	500.000	535.221	-7.0	106	0.00	4.27- 5.07
7	1,3-Dinitrobenzene	500.000	495.548	0.9	102	0.00	5.52- 6.32
8	3,5-Dinitroaniline	500.000	508.426	-1.7	99	0.00	5.99- 6.79
9	Nitrobenzene	500.000	531.897	-6.4	105	0.00	7.05- 7.85
10	Nitroglycerin		----------NA----------				
11	Tetryl	500.000	481.471	3.7	92	0.00	9.01- 9.81
12	2,4,6-Trinitrotoluene	500.000	467.433	6.5	92	0.00	9.38-10.18
13	2-Amino-4,6-Dinitrotol	500.000	523.498	-4.7	104	0.00	9.87-10.67
14	4-Amino-2,6-Dinitrotol	500.000	518.690	-3.7	103	0.00	10.31-11.11
15 S	3,4-Dinitrotoluene		----------NA----------				
16	2,4-Dinitrotoluene	500.000	499.044	0.2	104	0.00	11.26-12.06
17	2,6-Dinitrotoluene	500.000	504.985	-1.0	104	0.00	11.73-12.53
18	o-Nitrotoluene	500.000	523.881	-4.8	106	0.00	15.46-16.33
19	p-Nitrotoluene	500.000	514.032	-2.8	105	0.00	16.24-17.24
20	m-Nitrotoluene	500.000	504.224	-0.8	101	0.00	17.71-18.71
21	PETN		----------NA----------				
*****	Signal #2 *****						
1	TNX	500.000	549.938	-10.0	107	0.00	1.10- 1.70
2	HMX	500.000	589.372	-17.9#	115	0.00	1.23- 1.83
3	DNX	500.000	527.099	-5.4	107	0.00	1.49- 2.09
4	MNX	500.000	531.297	-6.3	106	0.00	2.08- 2.68
5	RDX	500.000	531.177	-6.2	104	0.00	2.59- 3.39
6	1,3,5-Trinitrobenzene	500.000	533.315	-6.7	104	0.00	4.27- 5.07
7	1,3-Dinitrobenzene	500.000	505.729	-1.1	102	0.00	5.52- 6.32
8	3,5-Dinitroaniline	500.000	496.606	0.7	98	0.00	5.99- 6.79
9	Nitrobenzene	500.000	531.087	-6.2	106	0.00	7.05- 7.85
10	Nitroglycerin	2500.000	2481.924	0.7	98	0.00	8.54- 9.54
11	Tetryl	500.000	463.053	7.4	90	0.00	9.01- 9.81
12	2,4,6-Trinitrotoluene	500.000	490.675	1.9	95	0.00	9.37-10.17
13	2-Amino-4,6-Dinitrotol	500.000	518.998	-3.8	103	-0.01	9.88-10.68
14	4-Amino-2,6-Dinitrotol	500.000	524.047	-4.8	102	0.00	10.32-11.12
15 S	3,4-Dinitrotoluene		----------NA----------				
16	2,4-Dinitrotoluene	500.000	493.624	1.3	105	-0.01	11.26-12.06
17	2,6-Dinitrotoluene	500.000	506.481	-1.3	107	0.00	11.73-12.53

8.6.6

8

Initial Calibration Verification

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM
Sample: GBB1091-ICV1091
Lab FileID: BB041661.D

18	o-Nitrotoluene	500.000	522.321	-4.5	108	0.00	15.33-16.33
19	p-Nitrotoluene	500.000	489.165	2.2	105	0.00	16.24-17.24
20	m-Nitrotoluene	500.000	495.276	0.9	102	0.00	17.72-18.72
		Amount	Calc.	%Drift			
21	PETN	2500.000	2578.127	-3.1	105	0.03	23.76-25.72

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB041658.D 8330BPLUS.M Thu May 01 14:40:50 2014

8.9.6

8

Continuing Calibration Summary

Job Number: FA14479 **Sample:** GBB1091-CC1091
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** BB041673.D
Project: Melrose Air Force Range, NM

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0501BPL\BB041673.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\0501BPL\BB041673.D\dad1A.ch
Acq On : 01-May-2014, 20:27:10 Operator: kismetl
Sample : cc1091-1000 Inst : G1315B
Misc : OP51410,GBB1091,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330BPLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 01 13:21:13 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	1013.611	-1.4	101	0.00	1.10- 1.70
2	HMX	1000.000	996.646	0.3	101	0.00	1.23- 1.83
3	DNX	1000.000	1028.097	-2.8	102	0.00	1.49- 2.09
4	MNX	1000.000	997.308	0.3	102	0.00	2.08- 2.68
5	RDX	1000.000	1037.111	-3.7	104	0.00	2.59- 3.39
6	1,3,5-Trinitrobenzene	1000.000	1018.160	-1.8	102	0.00	4.27- 5.07
7	1,3-Dinitrobenzene	1000.000	971.161	2.9	101	0.00	5.52- 6.32
8	3,5-Dinitroaniline	1000.000	1020.554	-2.1	102	0.00	5.99- 6.79
9	Nitrobenzene	1000.000	977.878	2.2	100	0.00	7.05- 7.85
10	Nitroglycerin		----------NA----------				
11	Tetryl	1000.000	1069.956	-7.0	103	0.00	9.01- 9.81
12	2,4,6-Trinitrotoluene	1000.000	1039.223	-3.9	103	0.00	9.38-10.18
13	2-Amino-4,6-Dinitrotol	1000.000	1036.458	-3.6	103	0.00	9.87-10.67
14	4-Amino-2,6-Dinitrotol	1000.000	1013.942	-1.4	103	0.00	10.31-11.11
15 S	3,4-Dinitrotoluene	1000.000	1018.662	-1.9	105	0.00	10.58-11.38
16	2,4-Dinitrotoluene	1000.000	967.184	3.3	103	0.00	11.26-12.06
17	2,6-Dinitrotoluene	1000.000	973.308	2.7	104	0.00	11.73-12.53
18	o-Nitrotoluene	1000.000	974.618	2.5	103	0.01	15.46-16.33
19	p-Nitrotoluene	1000.000	971.082	2.9	102	0.00	16.24-17.24
20	m-Nitrotoluene	1000.000	975.915	2.4	102	0.02	17.71-18.71
21	PETN		----------NA----------				
*****	Signal #2 *****						
1	TNX	1000.000	1016.590	-1.7	102	0.00	1.10- 1.70
2	HMX	1000.000	1025.139	-2.5	102	0.00	1.23- 1.83
3	DNX	1000.000	995.959	0.4	102	0.00	1.49- 2.09
4	MNX	1000.000	1005.076	-0.5	101	0.00	2.08- 2.68
5	RDX	1000.000	1021.600	-2.2	101	0.00	2.59- 3.39
6	1,3,5-Trinitrobenzene	1000.000	1035.414	-3.5	103	0.00	4.27- 5.07
7	1,3-Dinitrobenzene	1000.000	1013.550	-1.4	101	0.00	5.52- 6.32
8	3,5-Dinitroaniline	1000.000	1015.430	-1.5	100	0.00	5.99- 6.79
9	Nitrobenzene	1000.000	1012.051	-1.2	103	0.00	7.05- 7.85
10	Nitroglycerin	5000.000	5127.737	-2.6	102	0.00	8.54- 9.54
11	Tetryl	1000.000	1048.091	-4.8	102	0.00	9.01- 9.81
12	2,4,6-Trinitrotoluene	1000.000	1059.559	-6.0	103	0.00	9.37-10.17
13	2-Amino-4,6-Dinitrotol	1000.000	1024.558	-2.5	102	0.00	9.88-10.68
14	4-Amino-2,6-Dinitrotol	1000.000	1038.030	-3.8	102	0.00	10.32-11.12
15 S	3,4-Dinitrotoluene	1000.000	1030.314	-3.0	104	0.00	10.57-11.37
16	2,4-Dinitrotoluene	1000.000	957.716	4.2	102	0.00	11.26-12.06
17	2,6-Dinitrotoluene	1000.000	972.929	2.7	103	0.00	11.73-12.53

Continuing Calibration Summary

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM
Sample: GBB1091-CC1091
Lab FileID: BB041673.D

		Amount	Calc.	%Drift			
18	o-Nitrotoluene	1000.000	985.146	1.5	103	0.01	15.33-16.33
19	p-Nitrotoluene	1000.000	935.584	6.4	102	0.01	16.24-17.24
20	m-Nitrotoluene	1000.000	968.119	3.2	102	0.00	17.72-18.72
21	PETN	5000.000	4929.478	1.4	104	0.03	23.76-25.72

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB041659.D 8330BPLUS.M Fri May 02 08:14:03 2014

8.6.7

8

Continuing Calibration Summary

Job Number: FA14479 **Sample:** GBB1091-CC1091
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** BB041685.D
Project: Melrose Air Force Range, NM

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0501BPL\BB041685.D\dad1B.ch Vial: 42
Signal #2 : C:\HPCHEM\1\DATA\0501BPL\BB041685.D\dad1A.ch
Acq On : 02-May-2014, 03:26:36 Operator: kismetl
Sample : cc1091-1000,A Inst : G1315B
Misc : OP51410,GBB1091,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330BPLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 01 13:21:13 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	999.315	0.1	100	0.00	1.10- 1.70
2	HMX	1000.000	991.514	0.8	101	0.00	1.23- 1.83
3	DNX	1000.000	1021.416	-2.1	101	0.00	1.49- 2.09
4	MNX	1000.000	971.889	2.8	99	0.00	2.08- 2.68
5	RDX	1000.000	1018.556	-1.9	102	0.00	2.59- 3.39
6	1,3,5-Trinitrobenzene	1000.000	1028.728	-2.9	103	-0.01	4.27- 5.07
7	1,3-Dinitrobenzene	1000.000	954.696	4.5	99	-0.01	5.52- 6.32
8	3,5-Dinitroaniline	1000.000	1002.116	-0.2	100	-0.01	5.99- 6.79
9	Nitrobenzene	1000.000	980.438	2.0	100	-0.01	7.05- 7.85
10	Nitroglycerin		----------NA----------				
11	Tetryl	1000.000	1046.050	-4.6	101	-0.03	9.01- 9.81
12	2,4,6-Trinitrotoluene	1000.000	1015.974	-1.6	101	-0.03	9.38-10.18
13	2-Amino-4,6-Dinitrotol	1000.000	1006.027	-0.6	100	-0.02	9.87-10.67
14	4-Amino-2,6-Dinitrotol	1000.000	978.484	2.2	100	-0.02	10.31-11.11
15 S	3,4-Dinitrotoluene	1000.000	994.425	0.6	102	-0.03	10.58-11.38
16	2,4-Dinitrotoluene	1000.000	946.129	5.4	100	-0.03	11.26-12.06
17	2,6-Dinitrotoluene	1000.000	935.714	6.4	100	-0.03	11.73-12.53
18	o-Nitrotoluene	1000.000	960.769	3.9	101	-0.03	15.46-16.33
19	p-Nitrotoluene	1000.000	954.458	4.6	100	-0.04	16.24-17.24
20	m-Nitrotoluene	1000.000	958.921	4.1	101	-0.04	17.71-18.71
21	PETN		----------NA----------				

***** Signal #2 *****

1	TNX	1000.000	1000.733	-0.1	100	0.00	1.10- 1.70
2	HMX	1000.000	1013.690	-1.4	100	0.00	1.23- 1.83
3	DNX	1000.000	983.744	1.6	101	0.00	1.49- 2.09
4	MNX	1000.000	993.900	0.6	100	0.00	2.08- 2.68
5	RDX	1000.000	1013.606	-1.4	100	0.00	2.59- 3.39
6	1,3,5-Trinitrobenzene	1000.000	1022.339	-2.2	102	-0.01	4.27- 5.07
7	1,3-Dinitrobenzene	1000.000	975.475	2.5	97	-0.01	5.52- 6.32
8	3,5-Dinitroaniline	1000.000	998.764	0.1	98	-0.01	5.99- 6.79
9	Nitrobenzene	1000.000	985.819	1.4	100	-0.01	7.05- 7.85
10	Nitroglycerin	5000.000	4969.312	0.6	99	-0.03	8.54- 9.54
11	Tetryl	1000.000	1014.806	-1.5	99	-0.03	9.01- 9.81
12	2,4,6-Trinitrotoluene	1000.000	1018.002	-1.8	99	-0.03	9.37-10.17
13	2-Amino-4,6-Dinitrotol	1000.000	981.796	1.8	98	-0.03	9.88-10.68
14	4-Amino-2,6-Dinitrotol	1000.000	985.296	1.5	97	-0.03	10.32-11.12
15 S	3,4-Dinitrotoluene	1000.000	945.879	5.4	95	-0.03	10.57-11.37
16	2,4-Dinitrotoluene	1000.000	932.944	6.7	99	-0.04	11.26-12.06
17	2,6-Dinitrotoluene	1000.000	951.797	4.8	101	-0.03	11.73-12.53

Continuing Calibration Summary

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM
Sample: GBB1091-CC1091
Lab FileID: BB041685.D

		Amount	Calc.	%Drift			
18	o-Nitrotoluene	1000.000	970.167	3.0	101	-0.03	15.33-16.33
19	p-Nitrotoluene	1000.000	906.763	9.3	99	-0.04	16.24-17.24
20	m-Nitrotoluene	1000.000	954.281	4.6	100	-0.04	17.72-18.72
21	PETN	5000.000	4862.658	2.7	102	-0.08	23.76-25.72

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB041659.D 8330BPLUS.M Fri May 02 08:14:04 2014

8.6.8

8

Continuing Calibration Summary

Job Number: FA14479 **Sample:** GBB1091-ECC1091
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** BB041692.D
Project: Melrose Air Force Range, NM

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0501BPL\BB041692.D\dad1B.ch Vial: 42
Signal #2 : C:\HPCHEM\1\DATA\0501BPL\BB041692.D\dad1A.ch
Acq On : 02-May-2014, 07:34:45 Operator: kismetl
Sample : ecc1091-1000 Inst : G1315B
Misc : OP51394,GBB1091,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330BPLUS.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu May 01 13:21:13 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	994.671	0.5	100	0.00	1.10- 1.70
2	HMX	1000.000	970.267	3.0	98	0.00	1.23- 1.83
3	DNX	1000.000	1002.962	-0.3	99	0.00	1.49- 2.09
4	MNX	1000.000	974.278	2.6	99	0.00	2.08- 2.68
5	RDX	1000.000	1014.760	-1.5	101	-0.01	2.59- 3.39
6	1,3,5-Trinitrobenzene	1000.000	996.415	0.4	100	-0.02	4.27- 5.07
7	1,3-Dinitrobenzene	1000.000	951.281	4.9	99	-0.02	5.52- 6.32
8	3,5-Dinitroaniline	1000.000	1002.079	-0.2	100	-0.02	5.99- 6.79
9	Nitrobenzene	1000.000	987.935	1.2	101	-0.02	7.05- 7.85
10	Nitroglycerin		----------NA----------				
11	Tetryl	1000.000	1038.395	-3.8	100	-0.04	9.01- 9.81
12	2,4,6-Trinitrotoluene	1000.000	1002.042	-0.2	100	-0.04	9.38-10.18
13	2-Amino-4,6-Dinitrotol	1000.000	993.146	0.7	99	-0.04	9.87-10.67
14	4-Amino-2,6-Dinitrotol	1000.000	971.010	2.9	99	-0.03	10.31-11.11
15 S	3,4-Dinitrotoluene	1000.000	977.110	2.3	101	-0.04	10.58-11.38
16	2,4-Dinitrotoluene	1000.000	942.363	5.8	100	-0.05	11.26-12.06
17	2,6-Dinitrotoluene	1000.000	936.077	6.4	100	-0.05	11.73-12.53
18	o-Nitrotoluene	1000.000	964.078	3.6	102	-0.05	15.46-16.33
19	p-Nitrotoluene	1000.000	959.146	4.1	101	-0.07	16.24-17.24
20	m-Nitrotoluene	1000.000	971.306	2.9	102	-0.06	17.71-18.71
21	PETN		----------NA----------				

***** Signal #2 *****

1	TNX	1000.000	995.108	0.5	99	0.00	1.10- 1.70
2	HMX	1000.000	994.182	0.6	99	0.00	1.23- 1.83
3	DNX	1000.000	971.293	2.9	99	0.00	1.49- 2.09
4	MNX	1000.000	991.821	0.8	99	0.00	2.08- 2.68
5	RDX	1000.000	1013.489	-1.3	100	-0.01	2.59- 3.39
6	1,3,5-Trinitrobenzene	1000.000	1010.818	-1.1	101	-0.02	4.27- 5.07
7	1,3-Dinitrobenzene	1000.000	987.754	1.2	99	-0.02	5.52- 6.32
8	3,5-Dinitroaniline	1000.000	997.212	0.3	98	-0.02	5.99- 6.79
9	Nitrobenzene	1000.000	1002.013	-0.2	102	-0.02	7.05- 7.85
10	Nitroglycerin	5000.000	5034.520	-0.7	100	-0.03	8.54- 9.54
11	Tetryl	1000.000	1021.616	-2.2	100	-0.04	9.01- 9.81
12	2,4,6-Trinitrotoluene	1000.000	1031.920	-3.2	100	-0.04	9.37-10.17
13	2-Amino-4,6-Dinitrotol	1000.000	993.445	0.7	99	-0.05	9.88-10.68
14	4-Amino-2,6-Dinitrotol	1000.000	1006.005	-0.6	99	-0.04	10.32-11.12
15 S	3,4-Dinitrotoluene	1000.000	1002.866	-0.3	101	-0.04	10.57-11.37
16	2,4-Dinitrotoluene	1000.000	930.025	7.0	99	-0.05	11.26-12.06
17	2,6-Dinitrotoluene	1000.000	939.855	6.0	100	-0.05	11.73-12.53

8.6.9

8

Continuing Calibration Summary

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM
Sample: GBB1091-ECC1091
Lab FileID: BB041692.D

		Amount	Calc.	%Drift			
18	o-Nitrotoluene	1000.000	962.272	3.8	101	-0.05	15.33-16.33
19	p-Nitrotoluene	1000.000	919.481	8.1	100	-0.07	16.24-17.24
20	m-Nitrotoluene	1000.000	939.251	6.1	99	-0.07	17.72-18.72
21	PETN	5000.000	4764.250	4.7	100	-0.11	23.76-25.72

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB041659.D 8330BPLUS.M Fri May 02 08:14:05 2014

8.6.9

Initial Calibration Summary

Job Number: FA14479 **Sample:** GGG2227-ICC2227
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** GG056001.D
Project: Melrose Air Force Range, NM

Response Factor Report G1315B

Method : G:\METHODS\8330RP3.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 21 15:11:08 2014
Response via : Initial Calibration

Calibration Files
20 =GG055997.D 50 =GG055998.D 100 =GG055999.D 200 =GG056000.D
500 =GG056001.D 1000=GG056002.D 2000=GG056003.D

	Compound	20	50	100	200	500	1000	2000	Avg		%RSD
1)	TNX	1.035	1.115	1.037	1.062	1.058	1.047	1.091	1.064	E4	2.79
2)	HMX	5.864	4.698	4.052	3.917	3.781	3.730	3.832	4.268	E3	18.19
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9997										
	Response Ratio = 0.00000 + 3812.39467 *A										
3)	DNX	1.177	1.140	1.019	1.012	1.005	0.994	1.035	1.055	E4	6.90
4)	MNX	7.669	7.944	7.500	7.623	7.617	7.472	7.854	7.668	E3	2.27
5)	1,3,5-Trinitroben	1.233	1.308	1.189	1.227	1.220	1.196	1.249	1.232	E4	3.23
6)	RDX	6.111	8.273	6.286	6.349	6.180	5.989	6.209	6.485	E3	12.29
7)	1,3-Dinitrobenzen	1.753	1.957	1.755	1.791	1.763	1.745	1.800	1.795	E4	4.14
8)	Nitrobenzene	1.163	1.265	1.158	1.160	1.154	1.141	1.162	1.172	E4	3.54
9)	2,4,6-Trinitrotol	1.247	1.307	1.163	1.211	1.197	1.168	1.221	1.216	E4	4.07
10)	Nitroglycerin								0.000		-1.00
11)	Tetryl	7.105	8.123	8.045	7.783	7.929	7.769	8.207	7.852	E3	4.69
12)S	3,4-Dinitrotoluen	7.175	8.045	7.486	7.441	7.356	7.244	7.484	7.462	E3	3.80
13)	2,6-Dinitrotoluen	8.869	9.989	8.665	8.720	8.379	8.263	8.501	8.769	E3	6.57
14)	2,4-Dinitrotoluen	1.842	1.952	1.652	1.679	1.594	1.570	1.617	1.701	E4	8.37
15)	o-Nitrotoluene	8.585	9.055	7.756	7.648	7.191	7.067	7.143	7.778	E3	9.89
16)	3,5-Dinitroanilin	1.394	1.494	1.400	1.425	1.425	1.397	1.462	1.428	E4	2.64
17)	p-Nitrotoluene	7.801	7.731	6.681	6.775	6.425	6.335	6.437	6.884	E3	9.04
18)	4-Amino-2,6-Dinit	7.929	8.925	8.305	8.491	8.550	8.374	8.780	8.479	E3	3.85
19)	m-Nitrotoluene	8.591	9.086	8.155	8.289	8.285	8.214	8.362	8.426	E3	3.83
20)	2-Amino-4,6-Dinit	1.144	1.166	1.119	1.143	1.173	1.146	1.201	1.156	E4	2.29
21)	PETN								0.000		-1.00

Signal #2

1)	TNX	1.035	1.123	1.037	1.067	1.058	1.046	1.115	1.069	E4	3.39
2)	HMX	5.875	4.046	4.034	3.791	3.781	3.764	3.967	4.180	E3	18.12
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9992										
	Response Ratio = 0.00000 + 3918.85829 *A										
3)	DNX	1.187	1.033	1.021	0.997	1.005	0.993	1.048	1.040	E4	6.48
4)	MNX	1.044	1.186	1.108	1.193	1.173	1.174	1.225	1.158	E4	5.27
5)	1,3,5-Trinitroben	2.250	2.353	2.161	2.241	2.225	2.181	2.280	2.241	E4	2.85
6)	RDX	1.160	1.678	1.257	1.255	1.211	1.171	1.214	1.278	E4	14.09
7)	1,3-Dinitrobenzen	1.307	1.510	1.348	1.387	1.360	1.351	1.394	1.379	E4	4.66
8)	Nitrobenzene	1.164	1.179	1.051	1.060	1.052	1.040	1.061	1.087	E4	5.37
9)	2,4,6-Trinitrotol	1.798	1.752	1.595	1.624	1.596	1.559	1.644	1.653	E4	5.36
10)	Nitroglycerin	4.738	5.026	4.364	4.507	4.445	4.374	4.536	4.570	E3	5.19
11)	Tetryl	1.420	1.532	1.413	1.413	1.406	1.373	1.460	1.431	E4	3.58
12)S	3,4-Dinitrotoluen	2.801	1.955	1.561	1.589	1.495	1.467	1.523	1.770	E4	27.31
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9995										
	Response Ratio = 0.00000 + 15116.71324 *A										
13)	2,6-Dinitrotoluen	4.052	1.928	1.538	1.455	1.361	1.321	1.340	1.857	E4	53.35
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9997										

8.6.10

8

Initial Calibration Summary

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM
Sample: GGG2227-ICC2227
Lab FileID: GG056001.D

```
              Response Ratio = 0.00000 + 13393.91889 *A

14)  2,4-Dinitrotoluen 3.151 1.897 1.386 1.413 1.232 1.191 1.229 1.643 E4  43.06
            ---- Linear regr., Force(0,0) ----  Coefficient =  0.9994
              Response Ratio = 0.00000 + 12240.28071 *A

15)  o-Nitrotoluene    2.052 1.374 1.254 1.152 1.083 1.042 1.038 1.285 E4  27.99
            ---- Linear regr., Force(0,0) ----  Coefficient =  1.0000
              Response Ratio = 0.00000 + 10426.45886 *A

16)  3,5-Dinitroanilin 2.610 2.496 2.343 2.402 2.388 2.339 2.451 2.433 E4   3.96
17)  p-Nitrotoluene    1.198 1.241 1.076 1.100 1.023 1.007 1.023 1.095 E4   8.38
18)  4-Amino-2,6-Dinit 1.591 1.781 1.669 1.733 1.727 1.691 1.776 1.710 E4   3.88
19)  m-Nitrotoluene    1.446 1.498 1.354 1.425 1.377 1.366 1.398 1.409 E4   3.61
20)  2-Amino-4,6-Dinit 1.841 1.725 1.666 1.701 1.690 1.657 1.739 1.717 E4   3.62
21)  PETN              6.606 6.591 6.271 6.431 6.362 6.138 6.529 6.418 E3   2.71
-------------------------------------------------------------------------------
(#) = Out of Range

          8330RP3.M         Tue Apr 22 12:49:50 2014
```

8.6.10

8

Initial Calibration Verification

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM
Sample: GGG2227-ICV2227
Lab FileID: GG056004.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0415RP3X\GG056004.D\dad1B.ch Vial: 19
Signal #2 : G:\DATA\0415RP3X\GG056004.D\dad1A.ch
Acq On : 17-Apr-2014, 18:47:03 Operator: kismetl
Sample : icv2227-500 Inst : G1315B
Misc : OP51250,GGG2227,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : G:\METHODS\8330RP3.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Apr 21 15:11:08 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	500.000	516.999	-3.4	104	-0.01	6.85- 7.85
	Amount	Calc.	%Drift				
2	HMX	500.000	562.446	-12.5	113	-0.01	7.61- 8.61
	Amount	Calc.	%Drift				
3	DNX	500.000	494.263	1.1	104	-0.02	7.80- 8.80
4	MNX	500.000	515.562	-3.1	104	-0.02	9.12-10.12
5	1,3,5-Trinitrobenzene	500.000	559.149	-11.8	113	-0.01	10.07-11.07
6	RDX	500.000	531.005	-6.2	111	-0.02	10.48-11.48
7	1,3-Dinitrobenzene	500.000	511.874	-2.4	104	-0.02	12.48-13.48
8	Nitrobenzene	500.000	536.960	-7.4	109	-0.02	13.26-14.26
9	2,4,6-Trinitrotoluene	500.000	452.886	9.4	92	-0.02	14.21-15.21
10	Nitroglycerin		NA				
11	Tetryl	500.000	561.973	-12.4	111	-0.01	15.23-16.23
12 S	3,4-Dinitrotoluene		NA				
13	2,6-Dinitrotoluene	500.000	537.744	-7.5	113	-0.02	16.80-17.80
14	2,4-Dinitrotoluene	500.000	493.191	1.4	105	-0.02	17.65-18.65
15	o-Nitrotoluene	500.000	504.793	-1.0	109	-0.02	18.82-19.82
16	3,5-Dinitroaniline	500.000	523.012	-4.6	105	-0.01	19.31-20.31
17	p-Nitrotoluene	500.000	512.685	-2.5	110	-0.02	19.98-20.98
18	4-Amino-2,6-Dinitrotol	500.000	514.182	-2.8	102	-0.02	20.41-21.41
19	m-Nitrotoluene	500.000	521.823	-4.4	106	-0.02	21.25-22.25
20	2-Amino-4,6-Dinitrotol	500.000	543.763	-8.8	107	-0.02	22.84-23.84
21	PETN		NA				
*****	Signal #2 *****						
1	TNX	500.000	514.690	-2.9	104	-0.01	6.85- 7.85
	Amount	Calc.	%Drift				
2	HMX	500.000	506.177	-1.2	105	-0.01	7.61- 8.61
	Amount	Calc.	%Drift				
3	DNX	500.000	479.426	4.1	99	-0.02	7.80- 8.80
4	MNX	500.000	531.144	-6.2	105	-0.02	9.12-10.12
5	1,3,5-Trinitrobenzene	500.000	556.990	-11.4	112	-0.01	10.07-11.07
6	RDX	500.000	499.544	0.1	105	-0.02	10.48-11.48
7	1,3-Dinitrobenzene	500.000	514.442	-2.9	104	-0.02	12.48-13.48
8	Nitrobenzene	500.000	529.085	-5.8	109	-0.02	13.26-14.26
9	2,4,6-Trinitrotoluene	500.000	446.718	10.7	93	-0.02	14.21-15.21

Initial Calibration Verification

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM
Sample: GGG2227-ICV2227
Lab FileID: GG056004.D

10	Nitroglycerin	2500.000	2367.668	5.3	97	-0.02	14.74-15.74
11	Tetryl	500.000	566.431	-13.3	115	-0.02	15.23-16.23
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene			----------NA----------			
13	2,6-Dinitrotoluene	500.000	549.521	-9.9	108	-0.02	16.80-17.80
14	2,4-Dinitrotoluene	500.000	494.049	1.2	98	-0.02	17.65-18.65
15	o-Nitrotoluene	500.000	547.919	-9.6	106	-0.02	18.82-19.82
		Amount	Calc.	%Drift			
16	3,5-Dinitroaniline	500.000	497.960	0.4	101	-0.02	19.31-20.31
17	p-Nitrotoluene	500.000	495.946	0.8	106	-0.03	19.98-20.98
18	4-Amino-2,6-Dinitrotol	500.000	507.872	-1.6	101	-0.02	20.41-21.41
19	m-Nitrotoluene	500.000	519.191	-3.8	106	-0.03	21.25-22.25
20	2-Amino-4,6-Dinitrotol	500.000	526.807	-5.4	107	-0.02	22.84-23.84
21	PETN	2500.000	1851.242	26.0#	75	-0.03	23.79-24.79

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG056001.D 8330RP3.M Tue Apr 22 12:50:18 2014

8.6.11

8

Continuing Calibration Summary

Job Number: FA14479 **Sample:** GGG2230-CC2227
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** GG056023.D
Project: Melrose Air Force Range, NM

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0502RP3X\GG056023.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0502RP3X\GG056023.D\dad1A.ch
Acq On : 02-May-2014, 08:44:49 Operator: kismetl
Sample : cc2227-1000 Inst : G1315B
Misc : OP51394,GGG2230,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : G:\METHODS\8330RP3.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 02 09:21:26 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	996.037	0.4	101	0.00	6.80- 7.80
	Amount	Calc.	%Drift				
2	HMX	1000.000	1034.085	-3.4	106	0.00	7.52- 8.52
	Amount	Calc.	%Drift				
3	DNX	1000.000	923.018	7.7	98	0.00	7.72- 8.72
4	MNX	1000.000	974.630	2.5	100	0.00	9.00-10.00
5	1,3,5-Trinitrobenzene	1000.000	967.832	3.2	100	0.00	9.94-10.94
6	RDX	1000.000	945.347	5.5	102	0.00	10.31-11.31
7	1,3-Dinitrobenzene	1000.000	978.354	2.2	101	0.00	12.28-13.28
8	Nitrobenzene	1000.000	959.187	4.1	99	0.00	13.02-14.02
9	2,4,6-Trinitrotoluene	1000.000	961.028	3.9	100	0.00	13.94-14.94
10	Nitroglycerin		----------	NA	----------		
11	Tetryl	1000.000	909.944	9.0	92	0.00	14.87-15.87
12 S	3,4-Dinitrotoluene	1000.000	981.879	1.8	101	0.00	15.65-16.65
13	2,6-Dinitrotoluene	1000.000	956.554	4.3	102	0.00	16.42-17.42
14	2,4-Dinitrotoluene	1000.000	931.486	6.9	101	0.00	17.25-18.25
15	o-Nitrotoluene	1000.000	891.882	10.8	98	0.00	18.34-19.34
16	3,5-Dinitroaniline	1000.000	995.840	0.4	102	0.00	18.85-19.85
17	p-Nitrotoluene	1000.000	895.957	10.4	97	0.00	19.47-20.47
18	4-Amino-2,6-Dinitrotol	1000.000	1011.282	-1.1	102	0.00	19.85-20.85
19	m-Nitrotoluene	1000.000	947.665	5.2	97	0.00	20.69-21.69
20	2-Amino-4,6-Dinitrotol	1000.000	1011.957	-1.2	102	0.00	22.21-23.21
21	PETN		----------	NA	----------		
*****	Signal #2 *****						
1	TNX	1000.000	1040.165	-4.0	106	0.00	6.80- 7.80
	Amount	Calc.	%Drift				
2	HMX	1000.000	1102.946	-10.3	115	0.00	7.52- 8.52
	Amount	Calc.	%Drift				
3	DNX	1000.000	1092.988	-9.3	114	0.00	7.72- 8.72
4	MNX	1000.000	1057.843	-5.8	104	0.00	8.99- 9.99
5	1,3,5-Trinitrobenzene	1000.000	977.822	2.2	101	0.00	9.94-10.94
6	RDX	1000.000	958.880	4.1	105	0.00	10.31-11.31
7	1,3-Dinitrobenzene	1000.000	992.410	0.8	101	0.00	12.28-13.28
8	Nitrobenzene	1000.000	993.888	0.6	104	0.00	13.02-14.02
9	2,4,6-Trinitrotoluene	1000.000	1026.931	-2.7	109	0.00	13.94-14.94

Continuing Calibration Summary

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM
Sample: GGG2230-CC2227
Lab FileID: GG056023.D

10	Nitroglycerin	5000.000	5085.279	-1.7	106	0.00	14.44-15.44
11	Tetryl	1000.000	954.638	4.5	100	0.00	14.87-15.87
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene	1000.000	1001.109	-0.1	103	0.00	15.65-16.65
13	2,6-Dinitrotoluene	1000.000	966.389	3.4	98	0.00	16.42-17.42
14	2,4-Dinitrotoluene	1000.000	965.347	3.5	99	0.00	17.25-18.25
15	o-Nitrotoluene	1000.000	971.337	2.9	97	0.00	18.34-19.34
		Amount	Calc.	%Drift			
16	3,5-Dinitroaniline	1000.000	976.572	2.3	102	0.00	18.85-19.85
17	p-Nitrotoluene	1000.000	889.479	11.1	97	0.00	19.47-20.47
18	4-Amino-2,6-Dinitrotol	1000.000	1017.528	-1.8	103	0.00	19.85-20.85
19	m-Nitrotoluene	1000.000	948.256	5.2	98	0.00	20.69-21.69
20	2-Amino-4,6-Dinitrotol	1000.000	987.002	1.3	102	0.00	22.21-23.21
21	PETN	5000.000	4786.517	4.3	100	0.00	23.12-24.12

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG056002.D 8330RP3.M Fri May 02 12:47:19 2014

8.6.12

8

Continuing Calibration Summary

Job Number: FA14479 **Sample:** GGG2230-ECC2227
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** GG056029.D
Project: Melrose Air Force Range, NM

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0502RP3X\GG056029.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\0502RP3X\GG056029.D\dad1A.ch
Acq On : 02-May-2014, 11:58:27 Operator: kismetl
Sample : ecc2227-1000 Inst : G1315B
Misc : OP51394,GGG2230,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : G:\METHODS\8330RP3.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri May 02 09:21:26 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	991.390	0.9	101	0.02	6.80- 7.80
	Amount	Calc.	%Drift				
2	HMX	1000.000	1022.420	-2.2	104	0.03	7.52- 8.52
	Amount	Calc.	%Drift				
3	DNX	1000.000	920.562	7.9	98	0.03	7.72- 8.72
4	MNX	1000.000	970.400	3.0	100	0.04	9.00-10.00
5	1,3,5-Trinitrobenzene	1000.000	962.709	3.7	99	0.04	9.94-10.94
6	RDX	1000.000	909.359	9.1	98	0.05	10.31-11.31
7	1,3-Dinitrobenzene	1000.000	967.734	3.2	100	0.06	12.28-13.28
8	Nitrobenzene	1000.000	967.966	3.2	99	0.07	13.02-14.02
9	2,4,6-Trinitrotoluene	1000.000	953.067	4.7	99	0.07	13.94-14.94
10	Nitroglycerin		----------	NA	----------		
11	Tetryl	1000.000	937.612	6.2	95	0.09	14.87-15.87
12 S	3,4-Dinitrotoluene	1000.000	956.349	4.4	99	0.10	15.65-16.65
13	2,6-Dinitrotoluene	1000.000	929.586	7.0	99	0.10	16.42-17.42
14	2,4-Dinitrotoluene	1000.000	911.628	8.8	99	0.10	17.25-18.25
15	o-Nitrotoluene	1000.000	902.164	9.8	99	0.12	18.34-19.34
16	3,5-Dinitroaniline	1000.000	985.110	1.5	101	0.11	18.85-19.85
17	p-Nitrotoluene	1000.000	914.678	8.5	99	0.13	19.47-20.47
18	4-Amino-2,6-Dinitrotol	1000.000	995.489	0.5	101	0.13	19.85-20.85
19	m-Nitrotoluene	1000.000	968.461	3.2	99	0.14	20.69-21.69
20	2-Amino-4,6-Dinitrotol	1000.000	997.783	0.2	101	0.15	22.21-23.21
21	PETN		----------	NA	----------		
*****	Signal #2 *****						
1	TNX	1000.000	1028.216	-2.8	105	0.02	6.80- 7.80
	Amount	Calc.	%Drift				
2	HMX	1000.000	1078.721	-7.9	112	0.03	7.52- 8.52
	Amount	Calc.	%Drift				
3	DNX	1000.000	1053.752	-5.4	110	0.02	7.72- 8.72
4	MNX	1000.000	1032.802	-3.3	102	0.04	8.99- 9.99
5	1,3,5-Trinitrobenzene	1000.000	972.353	2.8	100	0.04	9.94-10.94
6	RDX	1000.000	916.652	8.3	100	0.05	10.31-11.31
7	1,3-Dinitrobenzene	1000.000	975.990	2.4	100	0.06	12.28-13.28
8	Nitrobenzene	1000.000	944.104	5.6	99	0.07	13.02-14.02
9	2,4,6-Trinitrotoluene	1000.000	931.198	6.9	99	0.07	13.94-14.94

Continuing Calibration Summary

Job Number: FA14479
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM
Sample: GGG2230-ECC2227
Lab FileID: GG056029.D

10	Nitroglycerin	5000.000	4768.447	4.6	100	0.09	14.44-15.44
11	Tetryl	1000.000	883.855	11.6	92	0.09	14.87-15.87
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene	1000.000	1000.641	-0.1	103	0.10	15.65-16.65
13	2,6-Dinitrotoluene	1000.000	976.148	2.4	99	0.10	16.42-17.42
14	2,4-Dinitrotoluene	1000.000	964.556	3.5	99	0.10	17.25-18.25
15	o-Nitrotoluene	1000.000	970.732	2.9	97	0.12	18.34-19.34
		Amount	Calc.	%Drift			
16	3,5-Dinitroaniline	1000.000	964.318	3.6	100	0.11	18.85-19.85
17	p-Nitrotoluene	1000.000	903.187	9.7	98	0.13	19.47-20.47
18	4-Amino-2,6-Dinitrotol	1000.000	998.056	0.2	101	0.14	19.85-20.85
19	m-Nitrotoluene	1000.000	966.472	3.4	100	0.14	20.69-21.69
20	2-Amino-4,6-Dinitrotol	1000.000	972.332	2.8	101	0.15	22.21-23.21
21	PETN	5000.000	4853.968	2.9	102	0.18	23.12-24.12

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG056002.D 8330RP3.M Fri May 02 12:47:20 2014

8.6.13

8

Southeast ACCUTEST LABORATORIES

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA14479
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

File ID: H50501W1.CSV Date Analyzed: 05/01/14 Methods: SW846 7470A
Analyst: JL Run ID: MA11567
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:06	MA11567-STD1	1		STD1
12:07	MA11567-STD2	1		STD2
12:08	MA11567-STD3	1		STD3
12:10	MA11567-STD4	1		STD4
12:12	MA11567-STD5	1		STD5
12:14	MA11567-STD6	1		STD6
12:16	MA11567-HSTD1	1		
12:18	MA11567-ICV1	1		
12:20	MA11567-ICB1	1		
12:24	MA11567-CRI1	1		
12:26	MA11567-CCV1	1		
12:27	MA11567-CCB1	1		
12:29	MP27197-MB1	1		
12:30	MP27197-B1	1		
12:32	FA14393-1L	1		(sample used for QC only; not part of login FA14479)
12:34	MP27197-D1	1		
12:35	MP27197-SD1	5		
12:36	MP27197-S1	1		
12:37	MP27197-S2	1		
12:39	ZZZZZZ	1		
12:41	FA14563-1	1		(sample used for QC only; not part of login FA14479)
12:43	MP27197-MB2	1		
12:44	MA11567-CCV2	1		
12:46	MA11567-CCB2	1		
12:48	MP27197-B2	1		
12:49	MP27197-D2	1		
12:51	MP27197-MB3	1		
12:52	MP27197-B3	1		
12:54	MP27198-MB1	1		
12:55	MP27198-B1	1		
12:57	FA14600-1	1		(sample used for QC only; not part of login FA14479)
12:59	MP27198-D1	1		
13:00	MP27198-SD1	5		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA14479
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

File ID: H50501W1.CSV Date Analyzed: 05/01/14 Methods: SW846 7470A
Analyst: JL Run ID: MA11567
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:01	MP27198-S1	1		
13:03	MA11567-CCV3	1		
13:05	MA11567-CCB3	1		
13:07	MP27198-S2	1		
13:08	ZZZZZZ	1		
13:10	ZZZZZZ	1		
13:11	ZZZZZZ	1		
13:13	ZZZZZZ	1		
13:14	ZZZZZZ	1		
13:15	ZZZZZZ	1		
13:17	ZZZZZZ	1		
13:18	ZZZZZZ	1		
13:19	ZZZZZZ	1		
13:21	MA11567-CCV4	1		
13:22	MA11567-CCB4	1		
13:24	ZZZZZZ	1		
13:25	ZZZZZZ	1		
13:27	ZZZZZZ	1		
13:28	ZZZZZZ	1		
13:29	ZZZZZZ	1		
13:30	ZZZZZZ	1		
13:32	ZZZZZZ	1		
13:33	ZZZZZZ	1		
13:34	ZZZZZZ	1		
13:36	MP27199-MB1	1		
13:37	MA11567-CCV5	1		
13:44	MA11567-CCB5	1		
13:45	MP27199-B1	1		
13:47	FA14452-4	1		(sample used for QC only; not part of login FA14479)
13:48	MP27199-D1	1		
13:50	MP27199-SD1	5		
13:51	MP27199-S1	1		
13:52	MP27199-S2	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA14479
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

File ID: H50501W1.CSV Date Analyzed: 05/01/14 Methods: SW846 7470A
Analyst: JL Run ID: MA11567
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:54	ZZZZZZ	1		
13:56	ZZZZZZ	1		
13:57	ZZZZZZ	1		
13:59	FA14479-1	1		
---------->	Last reportable sample/prep for job FA14479			
14:00	MA11567-CCV6	1		
14:01	MA11567-CCB6	1		
14:03	ZZZZZZ	1		
14:05	ZZZZZZ	1		
14:06	ZZZZZZ	1		
14:07	ZZZZZZ	1		
14:09	ZZZZZZ	1		
14:10	ZZZZZZ	1		
14:11	ZZZZZZ	1		
14:13	ZZZZZZ	1		
14:14	MA11567-CRI2	1		
14:15	MA11567-CCV7	1		
14:17	MA11567-CCB7	1		
---------->	Last reportable CCB for job FA14479			

Refer to raw data for calibration curve and standards.

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA14479
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

File ID: H50501W1.CSV Date Analyzed: 05/01/14 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA11567 Units: ug/l

Time: / Sample ID:			12:20 ICB1		12:27 CCB1		12:46 CCB2		13:05 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.50	.03	-0.065	<0.50	-0.057	<0.50	-0.062	<0.50	-0.066	<0.50

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA14479
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

File ID: H50501W1.CSV Date Analyzed: 05/01/14 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA11567 Units: ug/l

Time: / Sample ID:			13:22 CCB4		13:44 CCB5		14:01 CCB6		14:17 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.50	.03	-0.057	<0.50	0.025	<0.50	-0.016	<0.50	-0.011	<0.50

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA14479
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

File ID: H50501W1.CSV Date Analyzed: 05/01/14 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA11567 Units: ug/l

Time: / Sample ID: / Metal	ICV True	12:18 ICV1 Results	% Rec	CCV True	12:26 CCV1 Results	% Rec	CCV True	12:44 CCV2 Results	% Rec
Mercury	3	2.9	96.7	3	3.1	103.3	3	3.1	103.3

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA14479
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

File ID: H50501W1.CSV Date Analyzed: 05/01/14 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA11567 Units: ug/l

Time:		13:03			13:21			13:37	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	3	3.1	103.3	3.0	3.0	100.0	3.0	3.0	100.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA14479
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

File ID: H50501W1.CSV Date Analyzed: 05/01/14 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA11567 Units: ug/l

Time:		14:00			14:15	
Sample ID:	CCV	CCV6		CCV	CCV7	
Metal	True	Results	% Rec	True	Results	% Rec
Mercury	3	3.1	103.3	3.0	3.0	100.0

(*) Outside of QC limits
(anr) Analyte not requested

9.1.2
9

HIGH STANDARD CHECK SUMMARY

Login Number: FA14479
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

File ID: H50501W1.CSV Date Analyzed: 05/01/14 Methods: SW846 7470A
QC Limits: 95 to 105 % Recovery Run ID: MA11567 Units: ug/l

Time:		12:16	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Mercury	6	5.9	98.3

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA14479
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

File ID: H50501W1.CSV Date Analyzed: 05/01/14 Methods: SW846 7470A
QC Limits: 80 to 120 % Recovery Run ID: MA11567 Units: ug/l

Time: / Sample ID: / Metal	CRI True	CRIA True	12:24 CRI1 Results	% Rec	14:14 CRI2 Results	% Rec
Mercury	0.20		0.22	110.0	0.20	100.0

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA14479
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

QC Batch ID: MP27199
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 05/01/14

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.50	.03	.03	-0.0055	<0.50

Associated samples MP27199: FA14479-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA14479
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

QC Batch ID: MP27199
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 05/01/14 05/01/14

Metal	FA14452-4 Original	DUP	RPD	QC Limits	FA14452-4 Original	MS	Spikelot HGFLWS1	% Rec	QC Limits
Mercury	0.0	0.0	NC	0-20	0.0	3.0	3	100.0	80-120

Associated samples MP27199: FA14479-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA14479
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

QC Batch ID: MP27199
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 05/01/14

Metal	FA14452-4 Original	MSD	Spikelot HGFLWS1	% Rec	MSD RPD	QC Limit
Mercury	0.0	3.3	3	110.0	9.5	20

Associated samples MP27199: FA14479-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA14479
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

QC Batch ID: MP27199
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 05/01/14

Metal	BSP Result	Spikelot HGFLWS1	% Rec	QC Limits
Mercury	2.6	3	86.7	80-120

Associated samples MP27199: FA14479-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA14479
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

QC Batch ID: MP27199
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 05/01/14

Metal	FA14452-4 Original	SDL 1:5	%DIF	QC Limits
Mercury	0.00	0.00	NC	0-10

Associated samples MP27199: FA14479-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

Southeast ACCUTEST LABORATORIES

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries
- Instrument Runlogs/QC

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA14479
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Alkalinity, Total as CaCO3	GN61290	5.0	1.2	mg/l	250	245	98.0	90-113%
Chloride	GP23914/GN61195	2.0	0.0	mg/l	50	47.1	94.2	90-110%
Cyanide, Total	GP23946/GN61275	0.010	0.0	mg/l	0.1	0.107	107.0	90-110%
Solids, Total Dissolved	GN61240	100	0.0	mg/l				
Specific Conductivity	GN61256	1.0	0.0	umhos/cm				

Associated Samples:
Batch GN61240: FA14479-1
Batch GN61256: FA14479-1
Batch GN61290: FA14479-1
Batch GP23914: FA14479-1
Batch GP23946: FA14479-1
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA14479
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Alkalinity, Total as CaCO3	GN61290	FA14485-3	mg/l	310	313	1.0	0-20%
Cyanide, Total	GP23946/GN61275	FA14402-1	mg/l	0.0068	0.0060	18.4	0-20%
Solids, Total Dissolved	GN61240	FA14479-1	mg/l	6930	6910	0.3	0-5%
Specific Conductivity	GN61256	FA14479-1	umhos/cm	13200	13200	0.3	0-10%

Associated Samples:
Batch GN61240: FA14479-1
Batch GN61256: FA14479-1
Batch GN61290: FA14479-1
Batch GP23946: FA14479-1
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA14479
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chloride	GP23914/GN61195	FA14485-3	mg/l	427	50	445	36.0(a)	90-110%
Cyanide, Total	GP23946/GN61275	FA14402-1	mg/l	0.0068	0.1	0.10	93.2	90-110%
Nitrogen, Nitrate	GP23914/GN61195	FA14485-3	mg/l	0.83	2.5	2.9	82.8N(b)	90-110%
Nitrogen, Nitrite	GP23914/GN61195	FA14485-3	mg/l	0.50 U	2.5	2.8	112.0N(b)	90-110%
Sulfate	GP23914/GN61195	FA14485-3	mg/l	238	50	273	70.0(a)	90-110%

Associated Samples:
Batch GP23914: FA14479-1
Batch GP23946: FA14479-1
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
(b) Spike recovery indicates possible matrix interference.

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA14479
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Chloride	GP23914/GN61195	FA14485-3	mg/l	427	50	443	0.5	20%
Cyanide, Total	GP23946/GN61275	FA14402-1	mg/l	0.0068	0.1	0.11	9.5	20%
Nitrogen, Nitrate	GP23914/GN61195	FA14485-3	mg/l	0.83	2.5	2.9	0.0	20%
Nitrogen, Nitrite	GP23914/GN61195	FA14485-3	mg/l	0.50 U	2.5	2.8	0.0	20%
Sulfate	GP23914/GN61195	FA14485-3	mg/l	238	50	272	0.4	20%

Associated Samples:
Batch GP23914: FA14479-1
Batch GP23946: FA14479-1
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA14479
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

File ID: 314250401.TXT Date Analyzed: 04/25/14 Methods: EPA 300/SW846 9056A
Analyst: CH Run ID: GN61195
Parameters: Chloride,Nitrogen, Nitrate,Nitrogen, Nitrite,Sulfate

Time	Sample Description	Dilution Factor	PS Recov	Comments
09:25	GN61195-CCV1	1		
09:42	GP23914-MB1	1		
09:58	GP23914-B1	1		
10:49	ZZZZZZ	1		
11:06	ZZZZZZ	5		
11:23	ZZZZZZ	1		
11:40	ZZZZZZ	1		
11:57	ZZZZZZ	5		
12:14	ZZZZZZ	1		
12:31	GN61195-CCV2	1		
12:48	GN61195-CCB1	1		
13:05	FA14479-1	100		
13:22	ZZZZZZ	1		
13:39	ZZZZZZ	5		
13:56	ZZZZZZ	1		
14:13	ZZZZZZ	1		
14:33	GP23905-S1	1		
14:50	GP23905-S2	1		
15:07	ZZZZZZ	2		
15:24	ZZZZZZ	5		
15:41	GN61195-CCV3	1		
15:41	GN61195-CCV4	1		
15:57	GN61195-CCB2	1		
15:57	GN61195-CCB3	1		
16:14	FA14485-3	10		(sample used for QC only; not part of login FA14479)
16:31	FA14482-1	1		(sample used for QC only; not part of login FA14479)
16:48	ZZZZZZ	1		
17:05	ZZZZZZ	1		
17:22	ZZZZZZ	1		
17:39	ZZZZZZ	10		
17:56	ZZZZZZ	10		
18:13	ZZZZZZ	5		
18:30	GP23914-S1	10		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA14479
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

File ID: 314250401.TXT Date Analyzed: 04/25/14 Methods: EPA 300/SW846 9056A
Analyst: CH Run ID: GN61195
Parameters: Chloride,Nitrogen, Nitrate,Nitrogen, Nitrite,Sulfate

Time	Sample Description	Dilution Factor	PS Recov	Comments
18:47	GN61195-CCV5	1		
19:04	GN61195-CCB4	1		
19:21	GP23914-S2	10		
19:38	GP23914-S3	1		
19:55	GP23914-S4	1		
20:12	GN61195-CCV6	1		
20:29	GP23916-MB1	1		
20:45	GP23916-B1	1		
21:02	ZZZZZZ	1		
21:19	ZZZZZZ	1		
21:36	FA14487-9	1		(sample used for QC only; not part of login FA14479)
21:53	ZZZZZZ	1		
22:10	ZZZZZZ	1		
22:27	ZZZZZZ	1		
22:44	FA14482-8	1		(sample used for QC only; not part of login FA14479)
23:01	ZZZZZZ	50		
23:18	GN61195-CCV7	1		
23:35	GN61195-CCB5	1		
23:52	ZZZZZZ	1		
00:09	ZZZZZZ	1		
00:25	ZZZZZZ	1		
00:42	GP23916-S1	1		
00:59	GP23916-S2	1		
01:16	GP23916-S3	1		
01:33	GP23916-S4	1		
01:50	GN61195-CCV8	1		
02:07	GN61195-CCB6	1		

Refer to raw data for calibration curve and standards.

Instrument QC Summary
Inorganics Analyses

Login Number: FA14479
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

File ID: 314250401.TXT Date Analyzed: 04/25/14 Methods: EPA 300/SW846 9056A
Run ID: GN61195 Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN61195-CCV1	Chloride	47.0	2.0	0.80	50	94.0	90-110
GN61195-CCV1	Nitrogen, Nitrite	2.5	0.10	0.050	2.5	100.0	90-110
GN61195-CCV1	Nitrogen, Nitrate	2.3	0.10	0.050	2.5	92.0	90-110
GN61195-CCV1	Sulfate	49.8	2.0	0.60	50	99.6	90-110
GN61195-CCV2	Chloride	48.8	2.0	0.80	50	97.6	90-110
GN61195-CCV2	Nitrogen, Nitrite	2.5	0.10	0.050	2.5	100.0	90-110
GN61195-CCV2	Nitrogen, Nitrate	2.3	0.10	0.050	2.5	92.0	90-110
GN61195-CCV2	Sulfate	49.8	2.0	0.60	50	99.6	90-110
GN61195-CCB1	Chloride	0.80 U	2.0	0.80			
GN61195-CCB1	Nitrogen, Nitrite	0.050 U	0.10	0.050			
GN61195-CCB1	Nitrogen, Nitrate	0.050 U	0.10	0.050			
GN61195-CCB1	Sulfate	0.60 U	2.0	0.60			
GN61195-CCV4	Chloride	49.7	2.0	0.80	50	99.4	90-110
GN61195-CCV3	Chloride	49.7	2.0	0.80	50	99.4	90-110
GN61195-CCV3	Nitrogen, Nitrite	2.6	0.10	0.050	2.5	104.0	90-110
GN61195-CCV4	Nitrogen, Nitrite	2.6	0.10	0.050	2.5	104.0	90-110
GN61195-CCV3	Nitrogen, Nitrate	2.4	0.10	0.050	2.5	96.0	90-110
GN61195-CCV4	Nitrogen, Nitrate	2.4	0.10	0.050	2.5	96.0	90-110
GN61195-CCV3	Sulfate	50.0	2.0	0.60	50	100.0	90-110
GN61195-CCV4	Sulfate	50.0	2.0	0.60	50	100.0	90-110
GN61195-CCB2	Chloride	0.80 U	2.0	0.80			
GN61195-CCB3	Chloride	0.80 U	2.0	0.80			
GN61195-CCB2	Nitrogen, Nitrite	0.050 U	0.10	0.050			
GN61195-CCB3	Nitrogen, Nitrite	0.050 U	0.10	0.050			
GN61195-CCB3	Nitrogen, Nitrate	0.050 U	0.10	0.050			
GN61195-CCB2	Nitrogen, Nitrate	0.050 U	0.10	0.050			
GN61195-CCB3	Sulfate	0.60 U	2.0	0.60			
GN61195-CCB2	Sulfate	0.60 U	2.0	0.60			
GN61195-CCV5	Chloride	50.2	2.0	0.80	50	100.4	90-110
GN61195-CCV5	Nitrogen, Nitrite	2.6	0.10	0.050	2.5	104.0	90-110
GN61195-CCV5	Nitrogen, Nitrate	2.4	0.10	0.050	2.5	96.0	90-110
GN61195-CCV5	Sulfate	50.8	2.0	0.60	50	101.6	90-110
GN61195-CCB4	Chloride	0.80 U	2.0	0.80			
GN61195-CCB4	Nitrogen, Nitrite	0.050 U	0.10	0.050			
GN61195-CCB4	Nitrogen, Nitrate	0.050 U	0.10	0.050			
GN61195-CCB4	Sulfate	0.60 U	2.0	0.60			
GN61195-CCV6	Chloride	50.1	2.0	0.80	50	100.2	90-110
GN61195-CCV6	Nitrogen, Nitrite	2.6	0.10	0.050	2.5	104.0	90-110
GN61195-CCV6	Nitrogen, Nitrate	2.4	0.10	0.050	2.5	96.0	90-110
GN61195-CCV6	Sulfate	50.7	2.0	0.60	50	101.4	90-110
GN61195-CCV7	Chloride	49.9	2.0	0.80	50	99.8	90-110
GN61195-CCV7	Nitrogen, Nitrite	2.6	0.10	0.050	2.5	104.0	90-110
GN61195-CCV7	Nitrogen, Nitrate	2.4	0.10	0.050	2.5	96.0	90-110
GN61195-CCV7	Sulfate	50.6	2.0	0.60	50	101.2	90-110
GN61195-CCB5	Chloride	0.80 U	2.0	0.80			
GN61195-CCB5	Nitrogen, Nitrite	0.050 U	0.10	0.050			
GN61195-CCB5	Nitrogen, Nitrate	0.050 U	0.10	0.050			

Instrument QC Summary
Inorganics Analyses

Login Number: FA14479
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

File ID: 314250401.TXT Date Analyzed: 04/25/14 Methods: EPA 300/SW846 9056A
Run ID: GN61195 Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN61195-CCB5	Sulfate	0.60 U	2.0	0.60			
GN61195-CCV8	Chloride	50.2	2.0	0.80	50	100.4	90-110
GN61195-CCV8	Nitrogen, Nitrite	2.6	0.10	0.050	2.5	104.0	90-110
GN61195-CCV8	Nitrogen, Nitrate	2.4	0.10	0.050	2.5	96.0	90-110
GN61195-CCV8	Sulfate	50.9	2.0	0.60	50	101.8	90-110
GN61195-CCB6	Chloride	0.80 U	2.0	0.80			
GN61195-CCB6	Nitrogen, Nitrite	0.050 U	0.10	0.050			
GN61195-CCB6	Nitrogen, Nitrate	0.050 U	0.10	0.050			
GN61195-CCB6	Sulfate	0.60 U	2.0	0.60			

(!) Outside of QC limits

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA14479
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

File ID: A050114CN1.CSV Date Analyzed: 05/01/14 Methods: EPA 335.4/SW 9012B
Analyst: VK Run ID: GN61275
Parameters: Cyanide, Total

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:19	GN61275-ICV1	1		
11:20	GN61275-CCV1	1		
11:21	GN61275-CCB1	1		
11:22	ZZZZZZ	1		
11:23	GN61275-CRI1	1		
11:23	GN61275-HSTD1	1		
11:27	GP23946-S1	1		
11:28	GP23946-S2	1		
11:28	FA14402-1	1		(sample used for QC only; not part of login FA14479)
11:29	ZZZZZZ	1		
11:30	GN61275-CCV2	1		
11:31	GN61275-CCB2	1		
11:32	ZZZZZZ	1		
11:33	FA14479-1	1		
11:34	GP23946-MB1	1		
11:35	GP23946-B1	1		
11:36	GP23946-D1	1		
11:40	GN61275-CCV3	1		
11:41	GN61275-CCB3	1		
11:46	ZZZZZZ	1		
11:46	GN61275-CCV4	1		
11:47	GN61275-CCB4	1		

Refer to raw data for calibration curve and standards.

Instrument QC Summary
Inorganics Analyses

Login Number: FA14479
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

File ID: A050114CN1.CSV Date Analyzed: 05/01/14 Methods: EPA 335.4/SW 9012B
Run ID: GN61275 Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN61275-ICV1	Cyanide, Total	0.25	0.010	0.0030	.25	100.0	90-110
GN61275-CCV1	Cyanide, Total	0.26	0.010	0.0030	.25	104.0	90-110
GN61275-CCB1	Cyanide, Total	0.0030 U	0.010	0.0030			
GN61275-CRI1	Cyanide, Total	0.012	0.010	0.0030	.01	120.0!	90-110
GN61275-HSTD1	Cyanide, Total	0.50	0.010	0.0030	.5	100.0	90-110
GN61275-CCV2	Cyanide, Total	0.25	0.010	0.0030	.25	100.0	90-110
GN61275-CCB2	Cyanide, Total	0.0030 U	0.010	0.0030			
GN61275-CCV3	Cyanide, Total	0.26	0.010	0.0030	.25	104.0	90-110
GN61275-CCB3	Cyanide, Total	0.0030 U	0.010	0.0030			
GN61275-CCV4	Cyanide, Total	0.26	0.010	0.0030	.25	104.0	90-110
GN61275-CCB4	Cyanide, Total	0.0030 U	0.010	0.0030			

(!) Outside of QC limits

Southeast ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

(Accutest New Jersey)

Includes the following where applicable:

- Chain of Custody

Accutest Laboratories Southeast

Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.accutest.com

ACCUTEST JOB # :

PAGE 1 OF 1

Accutest Quote #	SKIFF #

Client / Reporting Information

Company Name: Accutest Laboratories

Address: 4405 Vineland Rd

City: Orlando State FL Zip 32811

Phone # (407) 425-6700 Fax#: (407) 425-0707

Project Information

Project Name: FA14479

Please send report to dawnd@accutest.com

For any other issues contact munam@accutest.com

Analytical Information

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air

Accutest Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY.	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NaOH+ZnAc	DI WATER	MeOH	AGMS, ALMS, ASMS, BAMS, BEMS, CAMS, CDMS, COMS, CRMS, CUMS, FEMS, KMS, MGMS, MNMS,	NAMS, NIMS, PBMS,SBMS, SEMS, TLMS, VMS, ZNMS by 6020	LAB USE ONLY
	FA14479-1	04/24/14	13:08		GW						x					X	X	FL
	FA14479-1F	04/24/14	13:08		GWF						x					X	X	

Turnaround Time (Business days)

Std. 10 Business Days — Approved By: / Date/Rush Code:

7 Day *RUSH* _____

5 Day *RUSH* _____

3 Day *EMERGENCY* _____

2 Day *EMERGENCY* _____

1 Day *EMERGENCY* _____

Other due 5/09/14

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [X] FULLT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

Ship to Laboratory - ALNJ

Approved by - EWP

RE: REVISED

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1		2 Fed Ex	3 Fed Ex	4/30/14 0850	4 ALNJ
Relinquished by/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
5		6	7		8

Lab Use Only : Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved Where Applicable: Y N Total # of Coolers: ____ Cooler Temperature (s) Celsius: _____

11.1

11

FA14479: Chain of Custody
Page 1 of 3
Accutest New Jersey

Accutest Laboratories Southeast
Subcontract Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL 407-425-6700 FAX 407-425-0707
www.accutest.com

Client / Reporting Information

Company Name: Accutest Laboratories
Address: 4405 Vineland Rd.
City: Orlando State: FL Zip: 32811
Phone #: (407) 425-6700 Fax#: (407) 425-0707

Project Information

Project Name: FA14479
Please send report to dawnd@accutest.com
For any other issues contact munam@accutest.com

Analytical Information

AGMS, ALMS, ASMS, BAMS, BEMS, CAMS, CDMS, COMS
MGMS, MNMS, NAMS, NIMS, PBMS
SBMS, SEMS, TLMS, VMS, ZNMS, BY(6020)

Please see the PM's COC 4/30 TH

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe

Lab ID #	Sample ID	COLLECTION DATE	TIME	SAMPLED BY	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	AGMS, ALMS, ASMS, BAMS, BEMS, CAMS, CDMS, COMS	MGMS, MNMS, NAMS, NIMS, PBMS	SBMS, SEMS, TLMS, VMS, ZNMS, BY(6020)	LAB USE ONLY
	FA14479-1	04/24/14	13:08		GW	1					X					X	X	X	
	FA14479-1F	04/24/14	13.08		GWF	1					X					X	X	X	FL

Turnaround Time (Business days)

Std. 10 Business Days
7 Day *RUSH*
5 Day *RUSH*
3 Day *EMERGENCY*
2 Day *EMERGENCY*
1 Day *EMERGENCY*
Other

Approved By: / Date/Rush Code:
due 5/9/14

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [x] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

Ship to Laboratory - ALNJ
Approved by - DD
TRK # 798696080590

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1	DESE	1424/14 1700	2 FY	3 FY	4/30/14 0930	4 ALNJ
5	Relinquished by/Affiliation	Date Time:	6 Received By/Affiliation	7 Relinquished By/Affiliation	Date Time:	8 Received By/Affiliation

Lab Use Only : Custody Seal in Place: Y (N) Temp Blank Provided: (Y) N Preserved Where Applicable: (Y) N Total # of Coolers: 1 Cooler Temperature (s) Celsius: 2.0°C B

TP 4/30/14

1A

11.1 11

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: FA14479 **Client:** _____ **Project:** _____

Date / Time Received: 4/30/2014 **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Initial/Adjusted): #1: (2/2); 0

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	Bar Therm		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control _Preservatio	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☐		☐	☑

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
www/accutest.com

FA14479: Chain of Custody
Page 3 of 3

Southeast ACCUTEST LABORATORIES

Metals Analysis

QC Data Summaries

(Accutest New Jersey)

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050114M3L.CSV Date Analyzed: 05/01/14 Methods: SW846 6020A
Analyst: SB Run ID: MA33923
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
14:41	MA33923-STD1	1		STDA
14:46	MA33923-STD2	1		STDA
14:51	MA33923-STD3	1		STDA
14:57	MA33923-STD4	1		STDB
15:02	MA33923-STD5	1		STDC
15:07	MA33923-STD6	1		STDD
15:13	MA33923-STD7	1		STDE
15:18	MA33923-STD8	1		STDF
15:24	MA33923-STD9	1		STDG
15:29	MA33923-STD10	1		STDH
15:34	MA33923-STD11	1		STDI
15:40	MA33923-STD12	1		STDJ
15:53	MA33923-ICVA1	1		
16:01	MA33923-ICB1	1		
16:09	MA33923-CRIB1	1		
16:19	MA33923-CCVA1	1		
16:24	MA33923-CCB1	1		
16:29	MA33923-ICSA1	1		
16:35	MA33923-ICSAB1	1		
16:40	ZZZZZZ	1		
16:46	MA33923-CCVA2	1		
16:54	MA33923-CCB2	1		
17:00	MA33923-CRIB2	1		
17:08	MP79249-MB1	2		Batch to reanalysis for Na, ICB/CCB out on LOD.
17:13	MP79249-LC1	10		
17:21	MP79249-S1	25		
17:31	MP79249-S2	25		
17:37	ZZZZZZ	1		
17:42	FA14479-1	2		
17:49	MP79249-SD1	10		
17:56	ZZZZZZ	1		
18:02	MA33923-CCVA3	1		
18:07	MA33923-CCB3	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050114M3L.CSV Date Analyzed: 05/01/14 Methods: SW846 6020A
Analyst: SB Run ID: MA33923
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
18:12	FA14479-1F	2		
18:18	MP79249-PS1	2		
18:23	ZZZZZZ	1		
18:28	ZZZZZZ	1		
18:34	ZZZZZZ	1		
18:39	MA33923-CCVA4	1		
18:45	MA33923-CCB4	1		
18:52	MA33923-CRIB3	1		
18:57	MP79249-S1	500		See rerun.
19:03	MP79249-S2	500		See rerun.
19:08	ZZZZZZ	1		
19:13	FA14479-1	500		See rerun.
19:19	MP79249-SD1	2500		See rerun.
19:24	FA14479-1F	500		
19:29	MP79249-PS1	500		
19:35	ZZZZZZ	1		
19:40	ZZZZZZ	1		
19:45	MA33923-CCVA5	1		
19:51	MA33923-CCB5	1		
19:56	MA33923-CRIB4	1		
20:01	MP79249-S1	100		
20:07	MP79249-S2	100		
20:12	ZZZZZZ	1		
20:17	FA14479-1	100		Ca,Mg
20:23	MP79249-SD1	500		
20:28	FA14479-1F	100		
20:33	MP79249-PS1	100		
---------->	Last reportable sample/prep for job FA14479			
20:39	ZZZZZZ	1		
20:44	ZZZZZZ	1		
20:50	MA33923-CCVA6	1		
20:55	MA33923-CCB6	1		
21:00	ZZZZZZ	1		
21:06	ZZZZZZ	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050114M3L.CSV Date Analyzed: 05/01/14 Methods: SW846 6020A
Analyst: SB Run ID: MA33923
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
21:11	ZZZZZZ	1		
21:16	ZZZZZZ	1		
21:22	ZZZZZZ	1		
21:27	ZZZZZZ	1		
21:33	ZZZZZZ	1		
21:38	ZZZZZZ	1		
21:43	ZZZZZZ	1		
21:48	ZZZZZZ	1		
21:54	MA33923-CCVA7	1		
21:59	MA33923-CCB7	1		
22:05	MA33923-CRIB5	1		
22:10	MA33923-CCVA8	1		
22:15	MA33923-CCB8	1		
---------->	Last reportable CCB for job FA14479			
22:21	ZZZZZZ	1		
22:26	ZZZZZZ	1		
22:31	ZZZZZZ	1		
22:37	ZZZZZZ	1		
22:42	ZZZZZZ	1		
22:47	ZZZZZZ	1		
22:53	ZZZZZZ	1		
22:58	ZZZZZZ	1		
23:04	ZZZZZZ	1		
23:09	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050114M3L.CSV Date Analyzed: 05/01/14 Methods: SW846 6020A
Analyst: SB Run ID: MA33923
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
14:41	MA33923-STD1	100	100	100	100	100	100	100	100
14:46	MA33923-STD2	100	100	100	100	100	100	100	100
14:51	MA33923-STD3	100	100	100	100	100	100	100	100
14:57	MA33923-STD4	99.686	99.888	89.477	98.485	98.859	92.967	97.985	99.799
15:02	MA33923-STD5	100.263	103.634	99.582	99.461	101.861	98.775	98.435	102.37
15:07	MA33923-STD6	98.063	98.881	97.12	98.62	98.579	97.243	98.577	99.314
15:13	MA33923-STD7	96.278	96.617	94.439	95.065	95.921	94.349	95.013	97.16
15:18	MA33923-STD8	94.523	93.693	92.349	93.344	94.335	93.417	94.824	95.453
15:24	MA33923-STD9	97.105	96.312	96.283	98.65	95.033	94.634	98.907	95.985
15:29	MA33923-STD10	96.981	97.419	97.182	98.607	96.803	96.173	97.55	97.247
15:34	MA33923-STD11	99.202	99.666	97.297	98.934	97.508	98.554	98.743	98.525
15:40	MA33923-STD12	97.406	98.984	97.668	98.5	98.027	96.777	97.017	97.201
15:53	MA33923-ICVA1	95.222	95.993	94.266	94.147	95.753	95.567	94.347	96.152
16:01	MA33923-ICB1	94.622	97.419	97.735	97.598	96.078	98.132	96.903	97.193
16:09	MA33923-CRIB1	98.482	96.098	96.582	97.689	97.155	95.255	97.138	97.619
16:19	MA33923-CCVA1	96.437	96.382	94.632	96.306	95.584	94.679	93.501	96.467
16:24	MA33923-CCB1	96.357	95.513	97.376	96.142	95.004	97.363	97.213	95.708
16:29	MA33923-ICSA1	94.249	95.27	93.52	93.743	94.047	92.711	93.861	92.01
16:35	MA33923-ICSAB1	94.329	96.172	92.241	94.951	94.685	93.078	95.185	92.847
16:40	ZZZZZZ	No results reported for the elements associated with this internal standard.							
16:46	MA33923-CCVA2	91.341	92.366	87.544	94.172	91.759	91.686	93.756	93.049
16:54	MA33923-CCB2	90.577	93.117	89.91	111.512	92.29	91.785	108.277	93.504
17:00	MA33923-CRIB2	93.548	93.012	88.548	93.981	93.147	92.084	93.985	93.176
17:08	MP79249-MB1	90.692	89.556	84.642	91.316	101.809	98.56	103.149	102.258
17:13	MP79249-LC1	89.541	88.572	85.828	90.465	91.146	89.424	92.332	92.283
17:21	MP79249-S1	100.113	101.842	106.219	108.064	101.02	104.733	105.398	101.444
17:31	MP79249-S2	103.93	106.833	110.178	110.857	104.253	109.986	109.626	106.261
17:37	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:42	FA14479-1	94.373	94.459	95.169	93.794	99.907	99.903	98.094	99.738
17:49	MP79249-SD1	97.613	100.936	105.909	104.966	98.423	102.096	100.915	99.044
17:56	ZZZZZZ	No results reported for the elements associated with this internal standard.							
18:02	MA33923-CCVA3	85.007	86.897	88.517	88.811	88.346	91.7	89.347	89.276
18:07	MA33923-CCB3	86.999	90.352	91.572	91.16	92.434	93.184	92.916	92.408

INTERNAL STANDARD SUMMARY

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050114M3L.CSV Date Analyzed: 05/01/14 Methods: SW846 6020A
Analyst: SB Run ID: MA33923
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
18:12	FA14479-1F	90.679	93.289	93.968	93.685	101.025	99.952	99.223	101.121
18:18	MP79249-PS1	95.448	102.216	102.864	102.281	108.748	108.49	106.149	108.374
18:23	ZZZZZZ	No results reported for the elements associated with this internal standard.							
18:28	ZZZZZZ	No results reported for the elements associated with this internal standard.							
18:34	ZZZZZZ	No results reported for the elements associated with this internal standard.							
18:39	MA33923-CCVA4	87.719	91.885	91.876	89.856	93.522	96.314	92.198	93.477
18:45	MA33923-CCB4	89.181	92.988	94.606	92.693	93.813	98.021	95.08	94.921
18:52	MA33923-CRIB3	87.794	91.039	92.32	93.596	92.811	96.543	95.058	95.034
18:57	MP79249-S1	No results reported for the elements associated with this internal standard.							
19:03	MP79249-S2	No results reported for the elements associated with this internal standard.							
19:08	ZZZZZZ	No results reported for the elements associated with this internal standard.							
19:13	FA14479-1	No results reported for the elements associated with this internal standard.							
19:19	MP79249-SD1	No results reported for the elements associated with this internal standard.							
19:24	FA14479-1F	91.098	94.322	97.442	94.025	96.202	99.266	96.052	97.316
19:29	MP79249-PS1	93.377	95.798	96.864	93.322	96.507	99.928	96.999	97.222
19:35	ZZZZZZ	No results reported for the elements associated with this internal standard.							
19:40	ZZZZZZ	No results reported for the elements associated with this internal standard.							
19:45	MA33923-CCVA5	86.761	86.26	87.716	88.012	89.914	91.056	90.309	89.776
19:51	MA33923-CCB5	87.237	89.551	91.373	90.13	92.136	94.868	93.011	92.587
19:56	MA33923-CRIB4	88.866	91.202	92.137	91.431	93.076	95.047	94.227	93.807
20:01	MP79249-S1	95.507	98.041	100.507	98.697	98.78	102.01	100.541	99.735
20:07	MP79249-S2	97.782	99.819	101.604	98.653	101.511	102.507	100.466	101.527
20:12	ZZZZZZ	No results reported for the elements associated with this internal standard.							
20:17	FA14479-1	97.908	99.799	102.774	98.388	99.54	102.61	99.961	100.339
20:23	MP79249-SD1	98.007	98.554	100.658	97.144	101.032	102.932	99.63	101.648
20:28	FA14479-1F	96.704	99.808	101.677	99.845	100.896	103.127	100.961	101.584
20:33	MP79249-PS1	99.562	100.079	102.007	98.905	100.997	104.472	101.14	102.01
20:39	ZZZZZZ	No results reported for the elements associated with this internal standard.							
20:44	ZZZZZZ	No results reported for the elements associated with this internal standard.							
20:50	MA33923-CCVA6	87.9	90.69	90.878	90.48	92.542	94.113	92.092	92.916
20:55	MA33923-CCB6	89.707	91.015	93.943	91.607	93.879	97.092	93.304	94.09
21:00	ZZZZZZ	No results reported for the elements associated with this internal standard.							
21:06	ZZZZZZ	No results reported for the elements associated with this internal standard.							

INTERNAL STANDARD SUMMARY

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050114M3L.CSV Date Analyzed: 05/01/14 Methods: SW846 6020A
Analyst: SB Run ID: MA33923
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
21:11	ZZZZZZ	No results reported for the elements associated with this internal standard.							
21:16	ZZZZZZ	No results reported for the elements associated with this internal standard.							
21:22	ZZZZZZ	No results reported for the elements associated with this internal standard.							
21:27	ZZZZZZ	No results reported for the elements associated with this internal standard.							
21:33	ZZZZZZ	No results reported for the elements associated with this internal standard.							
21:38	ZZZZZZ	No results reported for the elements associated with this internal standard.							
21:43	ZZZZZZ	No results reported for the elements associated with this internal standard.							
21:48	ZZZZZZ	No results reported for the elements associated with this internal standard.							
21:54	MA33923-CCVA7	85.717	90.609	94.264	92.032	93.121	98.028	94.237	93.517
21:59	MA33923-CCB7	88.497	93.981	96.953	94.846	97.866	99.027	97.543	98.552
22:05	MA33923-CRIB5	89.022	94.832	96.091	94.061	97.946	101.379	97.629	98.279
22:10	MA33923-CCVA8	86.363	91.917	95.112	93.165	95.42	97.164	94.923	95.907
22:15	MA33923-CCB8	88.095	92.103	97.261	95.014	96.552	100.964	97.028	97.644
22:21	ZZZZZZ	No results reported for the elements associated with this internal standard.							
22:26	ZZZZZZ	No results reported for the elements associated with this internal standard.							
22:31	ZZZZZZ	No results reported for the elements associated with this internal standard.							
22:37	ZZZZZZ	No results reported for the elements associated with this internal standard.							
22:42	ZZZZZZ	No results reported for the elements associated with this internal standard.							
22:47	ZZZZZZ	No results reported for the elements associated with this internal standard.							
22:53	ZZZZZZ	No results reported for the elements associated with this internal standard.							
22:58	ZZZZZZ	No results reported for the elements associated with this internal standard.							
23:04	ZZZZZZ	No results reported for the elements associated with this internal standard.							
23:09	ZZZZZZ	No results reported for the elements associated with this internal standard.							

! = Outside limits.

LEGEND: Istd#	Parameter	Limits	CCV/CCB Limits
Istd#1	Lithium	70-130 %	70-130 %
Istd#2	Scandium (45-1)	70-130 %	70-130 %
Istd#3	Scandium (45-2)	70-130 %	70-130 %
Istd#4	Scandium (45-3)	70-130 %	70-130 %
Istd#5	Germanium (72-1)	70-130 %	70-130 %
Istd#6	Germanium (72-2)	70-130 %	70-130 %
Istd#7	Germanium (72-3)	70-130 %	70-130 %
Istd#8	Germanium (74-1)	70-130 %	70-130 %

INTERNAL STANDARD SUMMARY

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050114M3L.CSV Date Analyzed: 05/01/14 Methods: SW846 6020A
Analyst: SB Run ID: MA33923
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Tl,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
14:41	MA33923-STD1	100	100	100	100	100	100	100	100
14:46	MA33923-STD2	100	100	100	100	100	100	100	100
14:51	MA33923-STD3	100	100	100	100	100	100	100	100
14:57	MA33923-STD4	92.915	100.181	99.155	91.388	99.938	91.307	98.532	91.829
15:02	MA33923-STD5	98.773	100.378	103.85	100.51	104.018	99.384	102.898	99.463
15:07	MA33923-STD6	98.552	99.633	99.707	98.45	100.321	97.952	100.334	98.907
15:13	MA33923-STD7	96.013	96.396	97.263	93.826	97.777	95.429	98.008	96.776
15:18	MA33923-STD8	93.974	95.637	95.085	94.363	97.656	94.683	96.708	95.638
15:24	MA33923-STD9	97.217	98.285	96.43	95.493	99.491	97.917	98.706	98.433
15:29	MA33923-STD10	98.334	98.659	96.136	97.497	99.336	98.315	97.911	98.982
15:34	MA33923-STD11	97.501	97.734	96.672	95.051	97.999	97.574	97.748	98.761
15:40	MA33923-STD12	98.722	97.027	95.151	94.166	99.03	97.138	99.517	98.504
15:53	MA33923-ICVA1	95.975	94.963	94.156	92.645	96.651	94.349	96.908	97.41
16:01	MA33923-ICB1	97.165	98.106	98.171	95.549	99.172	97.755	98.364	98.026
16:09	MA33923-CRIB1	96.977	100.342	97.134	96.692	98.543	97.575	98.757	98.65
16:19	MA33923-CCVA1	95.602	93.808	94.675	93.396	96.364	95.044	97.589	97.24
16:24	MA33923-CCB1	97.685	97.088	97.342	95.553	98.58	98.417	96.605	98.794
16:29	MA33923-ICSA1	92.088	91.301	86.261	85.119	92.682	88.472	95.823	92.492
16:35	MA33923-ICSAB1	90.677	92.394	86.73	84.722	93.269	87.971	98.01	92.672
16:40	ZZZZZZ	No results reported for the elements associated with this internal standard.							
16:46	MA33923-CCVA2	91.988	94.992	92.209	91.779	96.243	90.134	100.309	96.66
16:54	MA33923-CCB2	92.278	107.993	95.917	94.985	97.916	93.113	99.988	98.249
17:00	MA33923-CRIB2	92.07	94.869	95.34	93.667	99.462	93.009	99.885	96.22
17:08	MP79249-MB1	98.789	103.949	92.267	90.176	95.322	88.369	97.475	95.071
17:13	MP79249-LC1	90.814	92.849	92.309	91.726	96.212	90.579	98.745	95.36
17:21	MP79249-S1	106.159	107.399	96.054	98.05	101.521	103.107	104.155	104.097
17:31	MP79249-S2	111.212	109.699	100.147	100.075	105.117	106.765	106.601	107.216
17:37	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:42	FA14479-1	100.568	99.006	80.011	77.424	87.206	84.885	89.275	87.465
17:49	MP79249-SD1	101.477	101.688	93.51	94.773	98.805	101.241	102.042	102.805
17:56	ZZZZZZ	No results reported for the elements associated with this internal standard.							
18:02	MA33923-CCVA3	92.609	90.566	90.541	90.034	92.74	93.682	97.045	97.937
18:07	MA33923-CCB3	95.568	93.687	94.603	95.201	97.509	97.903	99.26	99.113

INTERNAL STANDARD SUMMARY

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050114M3L.CSV Date Analyzed: 05/01/14 Methods: SW846 6020A
Analyst: SB Run ID: MA33923
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Tl,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
18:12	FA14479-1F	100.995	99.549	80.358	76.956	86.679	84.811	90.168	88.182
18:18	MP79249-PS1	109.484	106.658	85.431	83.376	91.198	91.162	92.282	92.901
18:23	ZZZZZZ	No results reported for the elements associated with this internal standard.							
18:28	ZZZZZZ	No results reported for the elements associated with this internal standard.							
18:34	ZZZZZZ	No results reported for the elements associated with this internal standard.							
18:39	MA33923-CCVA4	94.963	93.162	94.199	93.372	97.247	97.219	99.333	100.919
18:45	MA33923-CCB4	96.627	94.96	96.578	96.048	99.109	99.47	99.85	99.057
18:52	MA33923-CRIB3	97.553	96.974	94.52	96.594	97.219	99.703	97.557	99.758
18:57	MP79249-S1	No results reported for the elements associated with this internal standard.							
19:03	MP79249-S2	No results reported for the elements associated with this internal standard.							
19:08	ZZZZZZ	No results reported for the elements associated with this internal standard.							
19:13	FA14479-1	No results reported for the elements associated with this internal standard.							
19:19	MP79249-SD1	No results reported for the elements associated with this internal standard.							
19:24	FA14479-1F	101.881	97.016	97.511	98.606	99.74	101.608	100.15	100.893
19:29	MP79249-PS1	99.653	96.847	97.914	95.788	100.419	102.424	100.101	101.061
19:35	ZZZZZZ	No results reported for the elements associated with this internal standard.							
19:40	ZZZZZZ	No results reported for the elements associated with this internal standard.							
19:45	MA33923-CCVA5	92.699	91.094	90.216	88.257	93.687	94.046	97.437	97.725
19:51	MA33923-CCB5	94.884	93.252	94.098	93.621	97.361	97.647	97.929	98.318
19:56	MA33923-CRIB4	94.666	94.555	95.913	94.347	97.487	98.866	99.696	98.052
20:01	MP79249-S1	105.26	100.751	97.919	98.999	102.013	104.721	101.88	105.074
20:07	MP79249-S2	104.846	101.936	100.396	99.921	102.623	105.952	102.954	104.055
20:12	ZZZZZZ	No results reported for the elements associated with this internal standard.							
20:17	FA14479-1	104.113	101.102	99.519	98.62	102.508	104.979	102.267	103.635
20:23	MP79249-SD1	104.06	100.66	100.653	99.732	103.762	104.652	101.867	103.208
20:28	FA14479-1F	103.749	100.996	99.481	99.529	103.096	105.186	102.626	103.738
20:33	MP79249-PS1	106.249	101.355	98.033	99.441	102.517	104.565	103.355	104.388
20:39	ZZZZZZ	No results reported for the elements associated with this internal standard.							
20:44	ZZZZZZ	No results reported for the elements associated with this internal standard.							
20:50	MA33923-CCVA6	94.532	92.555	92.538	91.579	96.1	95.571	98.171	98.332
20:55	MA33923-CCB6	97.628	94.702	95.988	95.785	99.134	98.845	98.803	99.772
21:00	ZZZZZZ	No results reported for the elements associated with this internal standard.							
21:06	ZZZZZZ	No results reported for the elements associated with this internal standard.							

INTERNAL STANDARD SUMMARY

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050114M3L.CSV Date Analyzed: 05/01/14 Methods: SW846 6020A
Analyst: SB Run ID: MA33923
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Tl,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
21:11	ZZZZZZ	No results reported for the elements associated with this internal standard.							
21:16	ZZZZZZ	No results reported for the elements associated with this internal standard.							
21:22	ZZZZZZ	No results reported for the elements associated with this internal standard.							
21:27	ZZZZZZ	No results reported for the elements associated with this internal standard.							
21:33	ZZZZZZ	No results reported for the elements associated with this internal standard.							
21:38	ZZZZZZ	No results reported for the elements associated with this internal standard.							
21:43	ZZZZZZ	No results reported for the elements associated with this internal standard.							
21:48	ZZZZZZ	No results reported for the elements associated with this internal standard.							
21:54	MA33923-CCVA7	98.272	95.123	92.392	93.163	95.497	98.488	96.947	98.351
21:59	MA33923-CCB7	100.326	98.287	98.025	98.028	100.419	101.773	100.602	100.314
22:05	MA33923-CRIB5	103.052	98.919	97.037	97.436	100.344	101.248	98.923	100.602
22:10	MA33923-CCVA8	99.046	95.688	93.354	92.619	96.265	97.423	98.236	99.445
22:15	MA33923-CCB8	101.016	98.67	97.262	97.818	99.294	102.054	98.325	101.573
22:21	ZZZZZZ	No results reported for the elements associated with this internal standard.							
22:26	ZZZZZZ	No results reported for the elements associated with this internal standard.							
22:31	ZZZZZZ	No results reported for the elements associated with this internal standard.							
22:37	ZZZZZZ	No results reported for the elements associated with this internal standard.							
22:42	ZZZZZZ	No results reported for the elements associated with this internal standard.							
22:47	ZZZZZZ	No results reported for the elements associated with this internal standard.							
22:53	ZZZZZZ	No results reported for the elements associated with this internal standard.							
22:58	ZZZZZZ	No results reported for the elements associated with this internal standard.							
23:04	ZZZZZZ	No results reported for the elements associated with this internal standard.							
23:09	ZZZZZZ	No results reported for the elements associated with this internal standard.							

! = Outside limits.

LEGEND:			CCV/CCB
Istd#	Parameter	Limits	Limits
Istd#9	Germanium (74-2)	70-130 %	70-130 %
Istd#10	Germanium (74-3)	70-130 %	70-130 %
Istd#11	Rhodium (103-1)	70-130 %	70-130 %
Istd#12	Rhodium (103-2)	70-130 %	70-130 %
Istd#13	Indium (115-1)	70-130 %	70-130 %
Istd#14	Indium (115-2)	70-130 %	70-130 %
Istd#15	Terbium (159-1)	70-130 %	70-130 %
Istd#16	Terbium (159-2)	70-130 %	70-130 %

INTERNAL STANDARD SUMMARY

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050114M3L.CSV Date Analyzed: 05/01/14 Methods: SW846 6020A
Analyst: SB Run ID: MA33923
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Tl,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20
14:41	MA33923-STD1	100	100	100	100
14:46	MA33923-STD2	100	100	100	100
14:51	MA33923-STD3	100	100	100	100
14:57	MA33923-STD4	100.794	93.008	99.614	94.682
15:02	MA33923-STD5	104.165	97.801	102.991	102.499
15:07	MA33923-STD6	100.239	98.634	99.149	100.053
15:13	MA33923-STD7	99.475	97.957	98.731	98.599
15:18	MA33923-STD8	98.237	95.376	98.189	97.462
15:24	MA33923-STD9	100.207	99.501	99.016	100.556
15:29	MA33923-STD10	100.079	97.813	97.83	98.727
15:34	MA33923-STD11	100.377	99.359	96.658	98.803
15:40	MA33923-STD12	99.835	99.066	96.362	97.207
15:53	MA33923-ICVA1	99.183	97.668	96.65	96.255
16:01	MA33923-ICB1	100.17	98.408	99.644	99.576
16:09	MA33923-CRIB1	100.022	99.893	99.471	102.361
16:19	MA33923-CCVA1	99.471	98.263	96.608	97.344
16:24	MA33923-CCB1	99.604	100.782	99.416	99.843
16:29	MA33923-ICSA1	97.479	94.282	90.181	87.685
16:35	MA33923-ICSAB1	99.005	93.827	91.183	86.997
16:40	ZZZZZZ	No results reported for the elements associated with this internal standard.			
16:46	MA33923-CCVA2	101.686	97.872	100.072	97.971
16:54	MA33923-CCB2	102.173	99.556	102.741	101.923
17:00	MA33923-CRIB2	102.095	97.941	101.694	99.856
17:08	MP79249-MB1	99.284	96.374	101.247	97.986
17:13	MP79249-LC1	100.581	97.167	100.364	99.339
17:21	MP79249-S1	105.506	106.429	98.572	100.114
17:31	MP79249-S2	109.003	108.739	100.813	103.969
17:37	ZZZZZZ	No results reported for the elements associated with this internal standard.			
17:42	FA14479-1	90.067	89.021	77.446	77.687
17:49	MP79249-SD1	103.572	103.79	93.714	97.139
17:56	ZZZZZZ	No results reported for the elements associated with this internal standard.			
18:02	MA33923-CCVA3	98.929	98.687	98.086	98.726
18:07	MA33923-CCB3	100.184	100.018	102.016	103.43

INTERNAL STANDARD SUMMARY

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050114M3L.CSV Date Analyzed: 05/01/14 Methods: SW846 6020A
Analyst: SB Run ID: MA33923
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Tl,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20
18:12	FA14479-1F	91.708	88.705	77.72	76.878
18:18	MP79249-PS1	94.888	94.698	79.698	80.639
18:23	ZZZZZZ	No results reported for the elements associated with this internal standard.			
18:28	ZZZZZZ	No results reported for the elements associated with this internal standard.			
18:34	ZZZZZZ	No results reported for the elements associated with this internal standard.			
18:39	MA33923-CCVA4	100.891	101.788	99.103	101.128
18:45	MA33923-CCB4	101.561	101.051	102.033	102.881
18:52	MA33923-CRIB3	98.629	101.993	99.841	105.706
18:57	MP79249-S1	No results reported for the elements associated with this internal standard.			
19:03	MP79249-S2	No results reported for the elements associated with this internal standard.			
19:08	ZZZZZZ	No results reported for the elements associated with this internal standard.			
19:13	FA14479-1	No results reported for the elements associated with this internal standard.			
19:19	MP79249-SD1	No results reported for the elements associated with this internal standard.			
19:24	FA14479-1F	102.396	102.545	102.5	106.787
19:29	MP79249-PS1	102.161	101.805	103.884	105.649
19:35	ZZZZZZ	No results reported for the elements associated with this internal standard.			
19:40	ZZZZZZ	No results reported for the elements associated with this internal standard.			
19:45	MA33923-CCVA5	99.143	98.551	97.685	99.142
19:51	MA33923-CCB5	100.109	98.674	100.892	101.421
19:56	MA33923-CRIB4	101.099	100.24	101.736	100.953
20:01	MP79249-S1	103.495	105.61	101.744	105.027
20:07	MP79249-S2	105.096	106.405	102.045	106.333
20:12	ZZZZZZ	No results reported for the elements associated with this internal standard.			
20:17	FA14479-1	103.059	104.686	102.477	104.579
20:23	MP79249-SD1	103.376	103.797	105.065	106.746
20:28	FA14479-1F	103.318	105.414	102.313	104.551
20:33	MP79249-PS1	103.533	104.883	101.892	105.105
20:39	ZZZZZZ	No results reported for the elements associated with this internal standard.			
20:44	ZZZZZZ	No results reported for the elements associated with this internal standard.			
20:50	MA33923-CCVA6	99.766	100.635	99.216	100.705
20:55	MA33923-CCB6	100.918	100.816	100.675	104.44
21:00	ZZZZZZ	No results reported for the elements associated with this internal standard.			
21:06	ZZZZZZ	No results reported for the elements associated with this internal standard.			

INTERNAL STANDARD SUMMARY

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050114M3L.CSV Date Analyzed: 05/01/14 Methods: SW846 6020A
Analyst: SB Run ID: MA33923
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Tl,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20
21:11	ZZZZZZ	No results reported for the elements associated with this internal standard.			
21:16	ZZZZZZ	No results reported for the elements associated with this internal standard.			
21:22	ZZZZZZ	No results reported for the elements associated with this internal standard.			
21:27	ZZZZZZ	No results reported for the elements associated with this internal standard.			
21:33	ZZZZZZ	No results reported for the elements associated with this internal standard.			
21:38	ZZZZZZ	No results reported for the elements associated with this internal standard.			
21:43	ZZZZZZ	No results reported for the elements associated with this internal standard.			
21:48	ZZZZZZ	No results reported for the elements associated with this internal standard.			
21:54	MA33923-CCVA7	98.831	101.09	96.409	100.485
21:59	MA33923-CCB7	100.494	100.647	101.077	102.155
22:05	MA33923-CRIB5	100.057	101.501	99.668	103.516
22:10	MA33923-CCVA8	99.54	100.465	96.315	100.837
22:15	MA33923-CCB8	99.663	101.746	100.334	102.371
22:21	ZZZZZZ	No results reported for the elements associated with this internal standard.			
22:26	ZZZZZZ	No results reported for the elements associated with this internal standard.			
22:31	ZZZZZZ	No results reported for the elements associated with this internal standard.			
22:37	ZZZZZZ	No results reported for the elements associated with this internal standard.			
22:42	ZZZZZZ	No results reported for the elements associated with this internal standard.			
22:47	ZZZZZZ	No results reported for the elements associated with this internal standard.			
22:53	ZZZZZZ	No results reported for the elements associated with this internal standard.			
22:58	ZZZZZZ	No results reported for the elements associated with this internal standard.			
23:04	ZZZZZZ	No results reported for the elements associated with this internal standard.			
23:09	ZZZZZZ	No results reported for the elements associated with this internal standard.			

! = Outside limits.

LEGEND: Istd#	Parameter	Limits	CCV/CCB Limits
Istd#17	Holmium (165-1)	70-130 %	70-130 %
Istd#18	Holmium (165-2)	70-130 %	70-130 %
Istd#19	Bismuth (209-1)	70-130 %	70-130 %
Istd#20	Bismuth (209-2)	70-130 %	70-130 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050114M3L.CSV Date Analyzed: 05/01/14 Methods: SW846 6020A
QC Limits: result < LOD Run ID: MA33923 Units: ug/l

Time: / Sample ID:				16:01 ICB1		16:24 CCB1		16:54 CCB2	
Metal	RL	IDL	LOD	raw	final	raw	final	raw	final
Aluminum	25	.072	20	0.040	<25	0.053	<25	0.028	<25
Antimony	0.50	.043	0.50	0.036	<0.50	0.060	<0.50	0.0055	<2.0
Arsenic	0.50	.013	0.40	-0.0078	<0.50	-0.0069	<0.50	-0.0032	<1.5
Barium	1.0	.02	0.50	-0.00033	<1.0	0.0067	<1.0	0.0015	<1.0
Beryllium	0.50	.0046	0.25	-0.054	<0.50	-0.055	<0.50	-0.056	<0.50
Boron	5.0	.91	2.5						
Cadmium	0.50	.0035	0.30	0.0021	<0.50	-0.00050	<0.50	-0.00078	<3.0
Calcium	250	.95	50	-1.0	<250	-0.93	<250	-1.1	<250
Chromium	1.0	.0092	0.50	0.0081	<1.0	0.0054	<1.0	0.0058	<4.0
Cobalt	0.50	.0031	0.25	-0.00036	<0.50	0.0016	<0.50	0.0024	<0.50
Copper	1.0	.013	0.50	-0.015	<1.0	-0.0049	<1.0	0.0035	<4.0
Iron	25	1.1	13	5.8	<25	9.2	<25	6.9	<25
Lead	0.50	.0052	0.25	-0.0065	<0.50	-0.0065	<0.50	-0.0073	<1.5
Magnesium	250	.11	130	0.022	<250	0.076	<250	0.066	<250
Manganese	1.0	.014	0.50	0.040	<1.0	0.042	<1.0	0.037	<2.0
Molybdenum	1.0	.0077	0.50						
Nickel	1.0	.019	1.0	0.019	<1.0	0.019	<1.0	0.010	<4.0
Potassium	250	2.2	50	-8.8	<250	-9.7	<250	-16	<250
Selenium	0.50	.018	0.50	0.025	<0.50	-0.0090	<0.50	-0.0014	<1.0
Silver	0.50	.0037	0.25	0.0018	<0.50	0.0015	<0.50	0.00072	<1.0
Sodium	250	1.2	50						
Strontium	5.0	.0043	2.5						
Thallium	0.50	.026	0.35	0.073	<0.50	0.17	<0.50	0.079	<1.0
Tin	5.0	.036	2.5						
Titanium	1.0	.028	0.50						
Vanadium	1.0	.04	0.50	-0.019	<1.0	-0.029	<1.0	-0.020	<1.5
Zinc	2.0	.1	1.5	0.028	<2.0	0.028	<2.0	-0.040	<4.0

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050114M3L.CSV Date Analyzed: 05/01/14 Methods: SW846 6020A
QC Limits: result < LOD Run ID: MA33923 Units: ug/l

Time: / Sample ID:				18:07 CCB3		18:45 CCB4		19:51 CCB5	
Metal	RL	IDL	LOD	raw	final	raw	final	raw	final
Aluminum	25	.072	20	1.3	<25	1.6	<25	0.91	<25
Antimony	0.50	.043	0.50	0.027	<2.0	-0.022	<2.0	-0.0079	<2.0
Arsenic	0.50	.013	0.40	-0.012	<1.5	-0.0097	<1.5	-0.0090	<1.5
Barium	1.0	.02	0.50	0.00061	<1.0	0.00098	<1.0	0.0074	<1.0
Beryllium	0.50	.0046	0.25	-0.055	<0.50	-0.057	<0.50	-0.056	<0.50
Boron	5.0	.91	2.5						
Cadmium	0.50	.0035	0.30	-0.00047	<3.0	-0.0031	<3.0	-0.0050	<3.0
Calcium	250	.95	50	-1.5	<250	-1.5	<250	-2.5	<250
Chromium	1.0	.0092	0.50	0.0029	<4.0	-0.0014	<4.0	-0.00030	<4.0
Cobalt	0.50	.0031	0.25	0.00034	<0.50	0.0024	<0.50	0.000048	<0.50
Copper	1.0	.013	0.50	0.019	<4.0	0.017	<4.0	-0.082	<4.0
Iron	25	1.1	13	9.5	<25	8.6	<25	9.6	<25
Lead	0.50	.0052	0.25	-0.0063	<1.5	-0.0071	<1.5	-0.0070	<1.5
Magnesium	250	.11	130	0.13	<250	0.15	<250	0.016	<250
Manganese	1.0	.014	0.50	0.050	<2.0	0.040	<2.0	0.033	<2.0
Molybdenum	1.0	.0077	0.50						
Nickel	1.0	.019	1.0	0.016	<4.0	0.013	<4.0	0.017	<4.0
Potassium	250	2.2	50	-13	<250	-13	<250	-12	<250
Selenium	0.50	.018	0.50	-0.0077	<1.0	0.034	<1.0	0.013	<1.0
Silver	0.50	.0037	0.25	0.00037	<1.0	-0.0014	<1.0	-0.00085	<1.0
Sodium	250	1.2	50						
Strontium	5.0	.0043	2.5						
Thallium	0.50	.026	0.35	0.16	<1.0	0.14	<1.0	0.18	<1.0
Tin	5.0	.036	2.5						
Titanium	1.0	.028	0.50						
Vanadium	1.0	.04	0.50	-0.012	<1.5	-0.017	<1.5	-0.022	<1.5
Zinc	2.0	.1	1.5	0.034	<4.0	0.032	<4.0	0.040	<4.0

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050114M3L.CSV Date Analyzed: 05/01/14 Methods: SW846 6020A
QC Limits: result < LOD Run ID: MA33923 Units: ug/l

Time: / Sample ID:				20:55 CCB6		21:59 CCB7		22:15 CCB8	
Metal	RL	IDL	LOD	raw	final	raw	final	raw	final
Aluminum	25	.072	20	0.92	<25	0.92	<25	0.92	<25
Antimony	0.50	.043	0.50	-0.010	<2.0	-0.030	<2.0	-0.029	<2.0
Arsenic	0.50	.013	0.40	0.00088	<1.5	-0.0060	<1.5	0.0032	<1.5
Barium	1.0	.02	0.50	0.0098	<1.0	0.0065	<1.0	0.012	<1.0
Beryllium	0.50	.0046	0.25	-0.056	<0.50	-0.056	<0.50	-0.055	<0.50
Boron	5.0	.91	2.5						
Cadmium	0.50	.0035	0.30	-0.0050	<3.0	-0.0057	<3.0	-0.0038	<3.0
Calcium	250	.95	50	-2.0	<250	-2.3	<250	-2.2	<250
Chromium	1.0	.0092	0.50	-0.00048	<4.0	-0.0051	<4.0	-0.0031	<4.0
Cobalt	0.50	.0031	0.25	0.0011	<0.50	-0.000026	<0.50	0.0012	<0.50
Copper	1.0	.013	0.50	-0.081	<4.0	-0.083	<4.0	-0.075	<4.0
Iron	25	1.1	13	9.3	<25	9.8	<25	9.8	<25
Lead	0.50	.0052	0.25	-0.0061	<1.5	-0.012	<1.5	-0.0098	<1.5
Magnesium	250	.11	130	0.017	<250	0.086	<250	0.058	<250
Manganese	1.0	.014	0.50	0.037	<2.0	0.042	<2.0	0.038	<2.0
Molybdenum	1.0	.0077	0.50						
Nickel	1.0	.019	1.0	0.015	<4.0	0.019	<4.0	0.011	<4.0
Potassium	250	2.2	50	-12	<250	-13	<250	-12	<250
Selenium	0.50	.018	0.50	0.026	<1.0	0.0075	<1.0	-0.014	<1.0
Silver	0.50	.0037	0.25	0.0012	<1.0	-0.00014	<1.0	-0.00025	<1.0
Sodium	250	1.2	50						
Strontium	5.0	.0043	2.5						
Thallium	0.50	.026	0.35	0.18	<1.0	0.18	<1.0	0.20	<1.0
Tin	5.0	.036	2.5						
Titanium	1.0	.028	0.50						
Vanadium	1.0	.04	0.50	-0.021	<1.5	-0.0061	<1.5	-0.013	<1.5
Zinc	2.0	.1	1.5	-0.039	<4.0	-0.020	<4.0	-0.018	<4.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050114M3L.CSV Date Analyzed: 05/01/14 Methods: SW846 6020A
QC Limits: 90 to 110 % Recovery Run ID: MA33923 Units: ug/l

Time: / Sample ID: / Metal	ICVA True	15:53 ICVA1 Results	% Rec	CCVA True	16:19 CCVA1 Results	% Rec	CCVA True	16:46 CCVA2 Results	% Rec
Aluminum	5500	5560	101.1	5000	5120	102.4	5000	4980	99.6
Antimony	60	62.5	104.2	50	52.9	105.8	50	52.8	105.6
Arsenic	60	58.4	97.3	50	48.6	97.2	50	50.2	100.4
Barium	60	60.7	101.2	50	49.8	99.6	50	48.1	96.2
Beryllium	60	58.3	97.2	50	50.1	100.2	50	48.1	96.2
Boron									
Cadmium	60	58.4	97.3	50	49.2	98.4	50	50.4	100.8
Calcium	5500	5530	100.5	5000	5140	102.8	5000	5140	102.8
Chromium	60	57.8	96.3	50	49.0	98.0	50	49.5	99.0
Cobalt	60	57.8	96.3	50	48.1	96.2	50	49.4	98.8
Copper	60	57.2	95.3	50	47.7	95.4	50	49.5	99.0
Iron	5500	5520	100.4	5000	5160	103.2	5000	5170	103.4
Lead	60	59.6	99.3	50	50.6	101.2	50	50.1	100.2
Magnesium	5500	5510	100.2	5000	5100	102.0	5000	4930	98.6
Manganese	60	58.8	98.0	50	49.6	99.2	50	49.1	98.2
Molybdenum									
Nickel	60	57.7	96.2	50	47.8	95.6	50	49.1	98.2
Potassium	5500	5520	100.4	5000	5120	102.4	5000	5050	101.0
Selenium	60	58.8	98.0	50	49.2	98.4	50	49.3	98.6
Silver	60	62.5	104.2	50	50.4	100.8	50	49.2	98.4
Sodium	anr								
Strontium									
Thallium	60	60.5	100.8	50	50.3	100.6	50	49.6	99.2
Tin									
Titanium									
Vanadium	60	59.1	98.5	50	49.9	99.8	50	50.5	101.0
Zinc	60	58.5	97.5	50	49.1	98.2	50	50.9	101.8

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050114M3L.CSV Date Analyzed: 05/01/14 Methods: SW846 6020A
QC Limits: 90 to 110 % Recovery Run ID: MA33923 Units: ug/l

Time: / Sample ID: / Metal	CCVA True	18:02 CCVA3 Results	% Rec	CCVA True	18:39 CCVA4 Results	% Rec	CCVA True	19:45 CCVA5 Results	% Rec
Aluminum	5000	5000	100.0	5000	4930	98.6	5000	5060	101.2
Antimony	50	52.8	105.6	50	51.6	103.2	50	52.1	104.2
Arsenic	50	49.0	98.0	50	49.0	98.0	50	49.2	98.4
Barium	50	48.5	97.0	50	48.9	97.8	50	48.6	97.2
Beryllium	50	49.3	98.6	50	49.5	99.0	50	48.7	97.4
Boron									
Cadmium	50	48.1	96.2	50	48.0	96.0	50	47.8	95.6
Calcium	5000	5080	101.6	5000	5100	102.0	5000	5110	102.2
Chromium	50	48.1	96.2	50	47.7	95.4	50	48.0	96.0
Cobalt	50	47.4	94.8	50	47.2	94.4	50	47.4	94.8
Copper	50	47.1	94.2	50	46.9	93.8	50	47.0	94.0
Iron	5000	5090	101.8	5000	5040	100.8	5000	5100	102.0
Lead	50	50.0	100.0	50	49.7	99.4	50	49.8	99.6
Magnesium	5000	4960	99.2	5000	4880	97.6	5000	5040	100.8
Manganese	50	49.2	98.4	50	49.0	98.0	50	49.5	99.0
Molybdenum									
Nickel	50	46.9	93.8	50	46.2	92.4	50	46.6	93.2
Potassium	5000	5030	100.6	5000	5050	101.0	5000	5100	102.0
Selenium	50	49.7	99.4	50	50.7	101.4	50	49.3	98.6
Silver	50	49.5	99.0	50	48.7	97.4	50	48.7	97.4
Sodium	anr								
Strontium									
Thallium	50	49.1	98.2	50	50.1	100.2	50	49.7	99.4
Tin									
Titanium									
Vanadium	50	48.9	97.8	50	49.1	98.2	50	48.9	97.8
Zinc	50	50.3	100.6	50	50.1	100.2	50	50.0	100.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050114M3L.CSV Date Analyzed: 05/01/14 Methods: SW846 6020A
QC Limits: 90 to 110 % Recovery Run ID: MA33923 Units: ug/l

Time: / Sample ID: / Metal	CCVA True	20:50 CCVA6 Results	% Rec	CCVA True	21:54 CCVA7 Results	% Rec	CCVA True	22:10 CCVA8 Results	% Rec
Aluminum	5000	4890	97.8	5000	4890	97.8	5000	4860	97.2
Antimony	50	51.1	102.2	50	51.6	103.2	50	51.0	102.0
Arsenic	50	49.0	98.0	50	48.6	97.2	50	48.0	96.0
Barium	50	48.1	96.2	50	48.8	97.6	50	48.5	97.0
Beryllium	50	49.0	98.0	50	49.2	98.4	50	49.6	99.2
Boron									
Cadmium	50	47.8	95.6	50	46.8	93.6	50	47.2	94.4
Calcium	5000	5070	101.4	5000	5000	100.0	5000	4950	99.0
Chromium	50	47.2	94.4	50	46.4	92.8	50	45.9	91.8
Cobalt	50	46.4	92.8	50	46.1	92.2	50	45.1	90.2
Copper	50	46.4	92.8	50	45.5	91.0	50	44.7	89.4*(a)
Iron	5000	4980	99.6	5000	4890	97.8	5000	4820	96.4
Lead	50	48.7	97.4	50	49.2	98.4	50	49.4	98.8
Magnesium	5000	4880	97.6	5000	4840	96.8	5000	4860	97.2
Manganese	50	48.0	96.0	50	48.0	96.0	50	47.4	94.8
Molybdenum									
Nickel	50	45.4	90.8	50	44.9	89.8*(a)	50	44.5	89.0*(a)
Potassium	5000	4960	99.2	5000	4940	98.8	5000	4960	99.2
Selenium	50	49.2	98.4	50	48.8	97.6	50	47.8	95.6
Silver	50	48.1	96.2	50	48.5	97.0	50	47.8	95.6
Sodium	anr								
Strontium									
Thallium	50	48.8	97.6	50	48.8	97.6	50	48.5	97.0
Tin									
Titanium									
Vanadium	50	48.4	96.8	50	48.1	96.2	50	47.5	95.0
Zinc	50	48.9	97.8	50	48.2	96.4	50	48.4	96.8

(*) Outside of QC limits
(anr) Analyte not requested
(a) No samples reported for this element in the area bracketed by this QC.

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050114M3L.CSV Date Analyzed: 05/01/14 Methods: SW846 6020A
QC Limits: 80 to 120 % Recovery Run ID: MA33923 Units: ug/l

Time: / Sample ID: / Metal	CRIB True	16:09 CRIB1 Results	% Rec	17:00 CRIB2 Results	% Rec	18:52 CRIB3 Results	% Rec	19:56 CRIB4 Results	% Rec
Aluminum	25	25.2	100.8	24.4	97.6	25.0	100.0	24.4	97.6
Antimony	0.50			0.57	114.0	0.54	108.0	0.51	102.0
Arsenic	0.50	0.50	100.0	0.52	104.0	0.55	110.0	0.53	106.0
Barium	1.0	1.0	100.0	0.98	98.0	1.1	110.0	1.0	100.0
Beryllium	0.50	0.45	90.0	0.45	90.0	0.48	96.0	0.46	92.0
Boron	5.0								
Cadmium	0.50	0.53	106.0	0.53	106.0	0.53	106.0	0.51	102.0
Calcium	250	250	100.0	248	99.2	247	98.8	238	95.2
Chromium	1.0	1.1	110.0	1.1	110.0	1.0	100.0	1.0	100.0
Cobalt	0.50	0.53	106.0	0.51	102.0	0.52	104.0	0.47	94.0
Copper	1.0	0.88	88.0	0.95	95.0	0.90	90.0	0.92	92.0
Iron	25	26.2	104.8	27.6	110.4	26.8	107.2	26.6	106.4
Lead	0.50	0.50	100.0	0.51	102.0	0.49	98.0	0.48	96.0
Magnesium	250	250	100.0	246	98.4	248	99.2	241	96.4
Manganese	0.50	0.53	106.0	0.53	106.0	0.53	106.0	0.53	106.0
Molybdenum	1.0								
Nickel	1.0	1.0	100.0	1.0	100.0	1.0	100.0	1.0	100.0
Potassium	250	242	96.8	232	92.8	240	96.0	229	91.6
Selenium	0.50	0.52	104.0	0.47	94.0	0.54	108.0	0.50	100.0
Silver	0.50	0.55	110.0	0.51	102.0	0.53	106.0	0.52	104.0
Sodium	250								
Strontium	5.0								
Thallium	0.50	0.44	88.0	0.44	88.0	0.49	98.0	0.47	94.0
Tin	5.0								
Titanium	1.0								
Vanadium	1.0	1.1	110.0	1.1	110.0	1.1	110.0	1.1	110.0
Zinc	2.0	2.4	120.0	2.3	115.0	2.2	110.0	2.1	105.0

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050114M3L.CSV Date Analyzed: 05/01/14 Methods: SW846 6020A
QC Limits: 80 to 120 % Recovery Run ID: MA33923 Units: ug/l

Time:		22:05	
Sample ID:	CRIB	CRIB5	
Metal	True	Results	% Rec
Aluminum	25	24.2	96.8
Antimony	0.50	0.49	98.0
Arsenic	0.50	0.54	108.0
Barium	1.0	1.0	100.0
Beryllium	0.50	0.46	92.0
Boron	5.0		
Cadmium	0.50	0.51	102.0
Calcium	250	237	94.8
Chromium	1.0	1.0	100.0
Cobalt	0.50	0.48	96.0
Copper	1.0	0.87	87.0
Iron	25	26.8	107.2
Lead	0.50	0.49	98.0
Magnesium	250	237	94.8
Manganese	0.50	0.51	102.0
Molybdenum	1.0		
Nickel	1.0	0.99	99.0
Potassium	250	226	90.4
Selenium	0.50	0.50	100.0
Silver	0.50	0.51	102.0
Sodium	250		
Strontium	5.0		
Thallium	0.50	0.47	94.0
Tin	5.0		
Titanium	1.0		
Vanadium	1.0	1.1	110.0
Zinc	2.0	2.1	105.0

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050114M3L.CSV Date Analyzed: 05/01/14 Methods: SW846 6020A
QC Limits: 80 to 120 % Recovery Run ID: MA33923 Units: ug/l

Time: / Sample ID: / Metal	ICSA True	ICSAB True	16:29 ICSA1 Results	% Rec	16:35 ICSAB1 Results	% Rec
Aluminum	100000	100000	93100	93.1	93800	93.8
Antimony			0.13		0.097	
Arsenic		20	0.015		19.0	95.0
Barium			0.092		0.090	
Beryllium			-0.046		-0.044	
Boron			2.0		1.2	
Cadmium		20	0.39		18.9	94.5
Calcium	100000	100000	94000	94.0	95200	95.2
Chromium		20	1.2		20.2	101.0
Cobalt		20	0.011		18.6	93.0
Copper		20	0.31		17.8	89.0
Iron	100000	100000	93900	93.9	95100	95.1
Lead			0.19		0.18	
Magnesium	100000	100000	94200	94.2	95000	95.0
Manganese		20	0.53		19.4	97.0
Molybdenum	2000	2000	2240	112.0	2260	113.0
Nickel		20	0.13		17.8	89.0
Potassium	100000	100000	94400	94.4	95500	95.5
Selenium			0.019		0.043	
Silver		20	0.015		18.4	92.0
Sodium	100000	100000	93400	93.4	94200	94.2
Strontium			0.58		0.59	
Thallium			0.040		0.014	
Tin			0.080		0.075	
Titanium	2000	2000	1960	98.0	1970	98.5
Vanadium			-0.017		-0.0048	
Zinc		20	0.91		18.2	91.0

(*) Outside of QC limits
(anr) Analyte not requested

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050214M2L.CSV Date Analyzed: 05/02/14 Methods: SW846 6020A
Analyst: SB Run ID: MA33933
Parameters: Na

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:21	MA33933-STD1	1		STDA
15:27	MA33933-STD2	1		STDA
15:35	MA33933-STD3	1		STDA
15:40	MA33933-STD4	1		STDA
15:46	MA33933-STD5	1		STDA
15:51	MA33933-STD6	1		STDB
15:56	MA33933-STD7	1		STDC
16:02	MA33933-STD8	1		STDD
16:07	MA33933-STD9	1		STDE
16:12	MA33933-STD10	1		STDF
16:18	MA33933-STD11	1		STDG
16:23	MA33933-STD12	1		STDH
16:28	MA33933-STD13	1		STDI
16:34	MA33933-STD14	1		STDJ
16:39	MA33933-ICVA1	1		
16:44	MA33933-ICB1	1		
16:50	MA33933-CRIB1	1		
16:55	MA33933-CCVA1	1		
17:00	MA33933-CCB1	1		
17:06	MA33933-ICSA1	1		
17:12	MA33933-ICSAB1	1		
17:18	ZZZZZZ	1		
17:23	MA33933-CCVA2	1		High RSD. See rerun
17:28	MA33933-CCB2	1		
17:34	MA33933-CCVA3	1		
17:39	MA33933-CCB3	1		
17:44	MP79191A-MB1	2		
17:50	MP79191A-LC1	2		
17:55	MP79191A-S1	10		
18:00	MP79191A-S2	10		
18:06	ZZZZZZ	1		
18:06	ZZZZZZ	1		
18:11	JB65617-8Q	5		(sample used for QC only; not part of login FA14479)

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050214M2L.CSV Date Analyzed: 05/02/14 Methods: SW846 6020A
Analyst: SB Run ID: MA33933
Parameters: Na

Time	Sample Description	Dilution Factor	PS Recov	Comments
18:16	MP79191A-SD1	25		
18:22	ZZZZZZ	5		
18:27	ZZZZZZ	1		
18:33	MA33933-CCVA4	1		
18:38	MA33933-CCB4	1		
18:43	MA33933-CRIB2	1		
18:49	MP79249-MB1	2		
18:54	MP79249-LC1	10		
19:00	MP79249-S1	500		Na
19:05	MP79249-S2	500		Na
19:10	ZZZZZZ	1		
19:16	FA14479-1	500		Na
19:21	MP79249-SD1	2500		Na
---------->	Last reportable sample/prep for job FA14479			
19:26	ZZZZZZ	1		
19:32	MA33933-CCVA5	1		
19:37	MA33933-CCB5	1		
19:42	FA14479-1F	500		CCVA High RSD
19:48	MP79249-PS1	500		CCVA High RSD.
19:53	ZZZZZZ	1		
19:59	ZZZZZZ	1		
20:04	ZZZZZZ	1		
20:09	ZZZZZZ	1		
20:15	MA33933-CCVA6	1		High RSD.
20:20	MA33933-CCB6	1		
20:25	MA33933-CRIB3	1		
20:31	MA33933-CCVA7	1		
20:36	MA33933-CCB7	1		
---------->	Last reportable CCB for job FA14479			
20:41	ZZZZZZ	1		
20:47	ZZZZZZ	1		
20:52	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050214M2L.CSV Date Analyzed: 05/02/14 Methods: SW846 6020A
Analyst: SB Run ID: MA33933
Parameters: Na

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
15:21	MA33933-STD1	100	100	100	100	100	100	100	100
15:27	MA33933-STD2	100	100	100	100	100	100	100	100
15:35	MA33933-STD3	100	100	100	100	100	100	100	100
15:40	MA33933-STD4	100	100	100	100	100	100	100	100
15:46	MA33933-STD5	100	100	100	100	100	100	100	100
15:51	MA33933-STD6	100	100	100	100	100	100	100	100
15:56	MA33933-STD7	102.647	104.237	102.739	103.001	102.142	102.017	100.711	100.796
16:02	MA33933-STD8	98.535	102.354	100.864	100.308	101.113	100.058	99.029	100.526
16:07	MA33933-STD9	98.065	100.013	98.744	99.66	99.292	99.245	97.968	98.682
16:12	MA33933-STD10	96.614	98.789	95.422	97.355	98.184	95.969	96.093	98.166
16:18	MA33933-STD11	98.456	99.911	100.091	100.141	98.586	98.357	99.791	97.62
16:23	MA33933-STD12	101.334	102.54	101.454	103.287	101.468	100.441	100.632	100.076
16:28	MA33933-STD13	100.472	101.978	101.924	99.057	100.515	100.492	98.196	99.589
16:34	MA33933-STD14	98.84	101.982	101.703	101.085	100.925	99.739	97.76	99.053
16:39	MA33933-ICVA1	96.482	100.054	98.035	98.371	99.247	98.763	95.763	98.545
16:44	MA33933-ICB1	98.625	100.866	100.275	100.386	99.798	99.411	99.316	99.106
16:50	MA33933-CRIB1	99.732	100.514	99.372	100.509	101.261	99.15	100.209	100.043
16:55	MA33933-CCVA1	96.566	101.385	100.121	98.528	99.319	98.626	96.611	98.583
17:00	MA33933-CCB1	98.104	102.611	100.503	101.869	100.195	101.125	100.195	99.584
17:06	MA33933-ICSA1	94.043	96.753	92.991	94.189	95.646	92.592	92.741	91.527
17:12	MA33933-ICSAB1	95.391	100.629	95.505	97.214	99.048	94.805	95.238	94.792
17:18	ZZZZZZ	92.461	95.203	92.614	96.794	96.613	94.664	96.673	96.516
17:23	MA33933-CCVA2	93.818	96.596	93.767	97.891	96.464	94.896	95.845	96.334
17:28	MA33933-CCB2	93.23	98.947	95.298	98.651	98.427	96.273	99.462	97.313
17:34	MA33933-CCVA3	95.321	99.093	94.936	98.267	98.466	94.839	97.581	98.16
17:39	MA33933-CCB3	96.659	98.577	96.87	101.23	99.567	97.689	99.607	99.243
17:44	MP79191A-MB1	97.593	99.807	95.032	100.778	110.829	104.762	107.639	109.295
17:50	MP79191A-LC1	93.539	95.08	87.603	98.997	114.895	104.593	113.45	114.599
17:55	MP79191A-S1	98.152	99.71	97.562	100.657	100.118	100.518	100.15	100.502
18:00	MP79191A-S2	99.417	101.554	99.532	101.495	101.977	100.763	101.515	101.523
18:06	ZZZZZZ	98.482	100.278	95.898	99.848	100.313	96.993	99.848	100.077
18:06	ZZZZZZ	98.482	100.278	95.898	99.848	100.313	96.993	99.848	100.077
18:11	JB65617-8Q	99.531	101.285	96.143	101.691	102.413	98.969	101.22	100.894

INTERNAL STANDARD SUMMARY

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050214M2L.CSV Date Analyzed: 05/02/14 Methods: SW846 6020A
Analyst: SB Run ID: MA33933
Parameters: Na

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
18:16	MP79191A-SD1	101.937	105.288	100.451	103.39	104.906	102.228	103.622	104.356
18:22	ZZZZZZ	99.697	102.73	98.11	100.537	99.73	98.017	96.752	98.737
18:27	ZZZZZZ	101.011	102.55	98.295	102.58	102.009	100.59	100.464	100.976
18:33	MA33933-CCVA4	95.486	97.691	93.02	96.597	96.974	94.489	96.124	96.175
18:38	MA33933-CCB4	95.488	97.56	96.122	99.731	98.465	96.531	99.451	97.785
18:43	MA33933-CRIB2	97.39	98.571	95.245	101.129	99.542	98.87	99.212	98.032
18:49	MP79249-MB1	98.084	98.008	93.492	100.22	110.083	104.121	107.541	108.188
18:54	MP79249-LC1	98.575	100.79	95.677	100.484	99.008	98.154	99.017	98.2
19:00	MP79249-S1	101.671	101.631	100.018	102.478	102.021	102.309	102.764	100.842
19:05	MP79249-S2	100.945	100.508	100.285	103.562	101.641	100.154	101.101	100.512
19:10	ZZZZZZ	98.802	98.807	97.596	100.261	98.797	97.655	100.404	98.736
19:16	FA14479-1	100.62	101.914	100.55	101.559	101.152	102.467	101.011	101.1
19:21	MP79249-SD1	98.271	100.944	99.611	102.424	100.956	101.454	101.112	99.873
19:26	ZZZZZZ	99.182	99.537	98.139	99.735	99.285	97.75	99.159	98.522
19:32	MA33933-CCVA5	95.869	98.032	94.106	97.891	97.969	94.755	95.984	96.544
19:37	MA33933-CCB5	96.355	97.805	96.304	99.544	98.185	97.016	98.207	97.258
19:42	FA14479-1F	No results reported for the elements associated with this internal standard.							
19:48	MP79249-PS1	No results reported for the elements associated with this internal standard.							
19:53	ZZZZZZ	98.121	98.524	97.935	99.471	99.169	97.692	98.756	99.265
19:59	ZZZZZZ	98.568	99.372	91.495	99.916	98.48	94.106	100.373	97.864
20:04	ZZZZZZ	93.757	93.712	96.982	100.193	95.793	98.271	99.705	95.12
20:09	ZZZZZZ	97.781	98.764	97.756	100.604	98.919	98.485	98.993	98.185
20:15	MA33933-CCVA6	90.837	91.44	94.451	97.766	92.77	93.622	97.21	92.536
20:20	MA33933-CCB6	96.381	98.748	97.609	100.772	99.224	98.609	99.605	97.906
20:25	MA33933-CRIB3	98.058	98.444	94.515	99.339	99.256	97.378	98.77	98.291
20:31	MA33933-CCVA7	95.784	96.735	96.554	97.726	98.578	97.555	95.076	96.254
20:36	MA33933-CCB7	96.141	97.886	96.852	100.511	97.555	98.331	99.492	97.522
20:41	ZZZZZZ	99.411	98.946	98.083	101.76	99.334	99.037	100.176	98.519
20:47	ZZZZZZ	96.891	97.919	95.953	98.849	98.491	98.488	97.307	97.443
20:52	ZZZZZZ	96.806	97.961	97.082	94.681	99.282	98	97.033	98.129

! = Outside limits.

LEGEND:			CCV/CCB
Istd#	Parameter	Limits	Limits
Istd#1	Lithium	70-130 %	70-130 %
Istd#2	Scandium (45-1)	70-130 %	70-130 %
Istd#3	Scandium (45-2)	70-130 %	70-130 %

INTERNAL STANDARD SUMMARY

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050214M2L.CSV Date Analyzed: 05/02/14 Methods: SW846 6020A
Analyst: SB Run ID: MA33933
Parameters: Na

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8

Istd#8	Scandium (45-3)	70-130 %	70-130 %
Istd#5	Germanium (72-1)	70-130 %	70-130 %
Istd#6	Germanium (72-2)	70-130 %	70-130 %
Istd#7	Germanium (72-3)	70-130 %	70-130 %
Istd#8	Germanium (74-1)	70-130 %	70-130 %

INTERNAL STANDARD SUMMARY

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050214M2L.CSV Date Analyzed: 05/02/14 Methods: SW846 6020A
Analyst: SB Run ID: MA33933
Parameters: Na

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
15:21	MA33933-STD1	100	100	100	100	100	100	100	100
15:27	MA33933-STD2	100	100	100	100	100	100	100	100
15:35	MA33933-STD3	100	100	100	100	100	100	100	100
15:40	MA33933-STD4	100	100	100	100	100	100	100	100
15:46	MA33933-STD5	100	100	100	100	100	100	100	100
15:51	MA33933-STD6	100	100	100	100	100	100	100	100
15:56	MA33933-STD7	101.857	98.679	101.823	101.784	101.126	100.428	100.761	98.954
16:02	MA33933-STD8	99.77	97.538	98.924	101.921	100.812	99.551	100.24	99.358
16:07	MA33933-STD9	98.137	96.945	99.378	100.36	98.939	98.009	99.571	99.8
16:12	MA33933-STD10	96.56	95.022	97.772	97.954	98.723	96.81	100.258	98.776
16:18	MA33933-STD11	97.848	96.871	98.565	100.688	99.163	98.965	100.329	100.396
16:23	MA33933-STD12	99.756	98.356	100.887	100.729	100.442	100.895	101.18	100.672
16:28	MA33933-STD13	99.576	96.249	98.143	99.388	98.662	99.382	100.314	100.443
16:34	MA33933-STD14	98.161	96.625	96.956	99.437	96.954	97.756	100.065	100.504
16:39	MA33933-ICVA1	97.035	94.155	96.051	96.894	97.52	96.988	101.552	98.982
16:44	MA33933-ICB1	99.522	97.455	99.596	101.622	100.13	99.615	100.032	99.592
16:50	MA33933-CRIB1	98.655	98.439	99.654	101.23	100.514	99.465	100.553	100.503
16:55	MA33933-CCVA1	97.869	95.237	96.899	97.572	98.438	96.821	98.454	98.759
17:00	MA33933-CCB1	100.95	98.705	100.304	100.927	100.331	100.828	99.852	100.057
17:06	MA33933-ICSA1	91.432	88.419	88.011	85.985	91.527	88.66	96.651	92.914
17:12	MA33933-ICSAB1	91.933	89.706	90.627	87.81	94.294	89.9	99.212	94.116
17:18	ZZZZZZ	94.616	94.17	97.499	97.108	98.881	95.944	100.793	99.42
17:23	MA33933-CCVA2	94.333	94.683	96.18	96.062	97.152	94.311	101.649	98.484
17:28	MA33933-CCB2	96.168	96.693	99.543	100.315	101.048	97.707	102.324	100.252
17:34	MA33933-CCVA3	95.539	96.062	97.603	97.279	99.989	95.403	102.464	99.85
17:39	MA33933-CCB3	97.212	97.461	99.768	103.351	101.933	98.566	103.417	101.51
17:44	MP79191A-MB1	104.067	106.775	99.555	100.223	100.926	95.429	103.857	99.883
17:50	MP79191A-LC1	104.803	111.538	94.076	92.648	94.895	88.567	100.717	95.237
17:55	MP79191A-S1	99.85	99.922	97.496	98.355	100.612	97.708	104.248	101.976
18:00	MP79191A-S2	100.928	100.515	98.212	100.188	101.504	99.625	104.012	102.127
18:06	ZZZZZZ	97.429	97.723	101.723	100.241	102.413	98.121	103.813	100.544
18:06	ZZZZZZ	97.429	97.723	101.723	100.241	102.413	98.121	103.813	100.544
18:11	JB65617-8Q	98.389	99.657	96.827	98.563	100.944	97.491	104.092	101.817

INTERNAL STANDARD SUMMARY

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050214M2L.CSV Date Analyzed: 05/02/14 Methods: SW846 6020A
Analyst: SB Run ID: MA33933
Parameters: Na

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
18:16	MP79191A-SD1	101.947	101.199	100.727	102.988	103.777	102.456	105.883	104.454
18:22	ZZZZZZ	96.434	96.107	91.85	93.308	96.51	93.493	101.906	100.161
18:27	ZZZZZZ	98.772	98.843	102.12	103.079	101.823	99.252	105.073	101.795
18:33	MA33933-CCVA4	94.218	93.755	95.782	96.074	97.092	93.86	101.377	98.325
18:38	MA33933-CCB4	97.218	97.46	98.72	99.828	99.57	98.348	101.752	100.353
18:43	MA33933-CRIB2	96.441	98.033	98.63	99.768	101.704	96.858	102.485	100.69
18:49	MP79249-MB1	102.874	107.007	97.243	98.699	100.365	93.911	102.714	99.864
18:54	MP79249-LC1	97.375	98.364	98.152	98.269	99.507	97.243	102.492	100.296
19:00	MP79249-S1	100.588	100.297	100.438	100.282	102.167	100.884	103.653	101.84
19:05	MP79249-S2	101.535	100.466	99.924	100.921	101.371	100.756	103.04	101.677
19:10	ZZZZZZ	98.834	97.312	99.812	101.324	100.897	97.677	102.894	100.787
19:16	FA14479-1	101.163	98.966	99.666	101.379	101.507	100.974	102.481	101.375
19:21	MP79249-SD1	100.053	100.472	100.814	101.876	101.773	102.595	103.545	102.205
19:26	ZZZZZZ	98.503	96.518	100.101	99.056	100.806	98.288	102.985	99.678
19:32	MA33933-CCVA5	95.887	94.164	93.886	95.054	97.396	94.098	100.078	98.313
19:37	MA33933-CCB5	96.347	97.289	97.448	98.315	98.81	96.61	100.609	99.15
19:42	FA14479-1F	No results reported for the elements associated with this internal standard.							
19:48	MP79249-PS1	No results reported for the elements associated with this internal standard.							
19:53	ZZZZZZ	97.243	98.159	99.34	99.822	99.259	98.501	101.308	101.115
19:59	ZZZZZZ	95.065	98.573	99.53	94.549	99.584	93.073	101.103	94.35
20:04	ZZZZZZ	96.908	97.097	94.588	98.284	95.369	97.599	95.279	98.198
20:09	ZZZZZZ	98.007	98.318	97.739	97.119	98.508	97.438	100.887	99.179
20:15	MA33933-CCVA6	94.837	94.53	88.862	95.294	92.383	93.611	94.677	97.363
20:20	MA33933-CCB6	97.596	98.045	99.138	99.723	100.143	97.706	102.261	98.218
20:25	MA33933-CRIB3	96.247	97.037	99.361	98.942	100.218	97.853	102.732	98.415
20:31	MA33933-CCVA7	95.549	94.208	95.506	95.372	97.035	95.571	99.728	97.86
20:36	MA33933-CCB7	98.293	97.355	97.14	99.404	98.906	98.234	100.603	99.469
20:41	ZZZZZZ	98.443	97.861	99.542	101.435	99.785	99.589	101.487	101.832
20:47	ZZZZZZ	95.181	96.956	98.444	99.09	98.76	96.243	101.044	98.036
20:52	ZZZZZZ	97.916	96.218	97.685	97.818	98.067	97.972	99.598	98.4

! = Outside limits.

LEGEND:			CCV/CCB
Istd#	Parameter	Limits	Limits
Istd#9	Germanium (74-2)	70-130 %	70-130 %
Istd#10	Germanium (74-3)	70-130 %	70-130 %
Istd#11	Rhodium (103-1)	70-130 %	70-130 %

INTERNAL STANDARD SUMMARY

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050214M2L.CSV Date Analyzed: 05/02/14 Methods: SW846 6020A
Analyst: SB Run ID: MA33933
Parameters: Na

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16

Istd#16 Rhodium (103-2)	70-130 % 70-130 %
Istd#13 Indium (115-1)	70-130 % 70-130 %
Istd#14 Indium (115-2)	70-130 % 70-130 %
Istd#15 Terbium (159-1)	70-130 % 70-130 %
Istd#16 Terbium (159-2)	70-130 % 70-130 %

INTERNAL STANDARD SUMMARY

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050214M2L.CSV Date Analyzed: 05/02/14 Methods: SW846 6020A
Analyst: SB Run ID: MA33933
Parameters: Na

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20
15:21	MA33933-STD1	100	100	100	100
15:27	MA33933-STD2	100	100	100	100
15:35	MA33933-STD3	100	100	100	100
15:40	MA33933-STD4	100	100	100	100
15:46	MA33933-STD5	100	100	100	100
15:51	MA33933-STD6	100	100	100	100
15:56	MA33933-STD7	101.078	101.164	102.708	100.796
16:02	MA33933-STD8	100.444	100.384	99.936	100.946
16:07	MA33933-STD9	98.707	98.623	98.99	98.927
16:12	MA33933-STD10	100.178	99.853	99.401	100.056
16:18	MA33933-STD11	98.966	100.91	98.423	100.166
16:23	MA33933-STD12	101.788	101.651	99.988	100.64
16:28	MA33933-STD13	100.507	100.819	97.317	99.016
16:34	MA33933-STD14	100.7	101.958	96.122	97.006
16:39	MA33933-ICVA1	100.172	100.239	97.807	96.919
16:44	MA33933-ICB1	100.798	100.438	99.829	100.72
16:50	MA33933-CRIB1	100.89	100.546	100.208	100.681
16:55	MA33933-CCVA1	99.239	100.037	97.21	96.95
17:00	MA33933-CCB1	100.037	102.189	100	100.802
17:06	MA33933-ICSA1	96.627	94.479	88.492	86.23
17:12	MA33933-ICSAB1	99.997	96.051	91.316	88.081
17:18	ZZZZZZ	101.061	100.535	101.092	99.746
17:23	MA33933-CCVA2	102.611	100.765	99.092	98.178
17:28	MA33933-CCB2	103.227	101.348	102.253	101.243
17:34	MA33933-CCVA3	102.136	102.26	99.646	99.217
17:39	MA33933-CCB3	102.759	102.722	102.775	102.942
17:44	MP79191A-MB1	102.832	102.913	104.259	101.535
17:50	MP79191A-LC1	101.084	98.206	97.458	95.287
17:55	MP79191A-S1	103.864	103.318	102.176	102.873
18:00	MP79191A-S2	104.415	104.438	101.969	103.159
18:06	ZZZZZZ	103.463	102.089	103.584	102.035
18:06	ZZZZZZ	103.463	102.089	103.584	102.035
18:11	JB65617-8Q	104.192	102.462	101.594	102.665

INTERNAL STANDARD SUMMARY

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050214M2L.CSV Date Analyzed: 05/02/14 Methods: SW846 6020A
Analyst: SB Run ID: MA33933
Parameters: Na

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20
18:16	MP79191A-SD1	106.206	106.173	105.154	105.517
18:22	ZZZZZZ	101.017	98.302	92.889	93.433
18:27	ZZZZZZ	105.283	104.103	104.17	103.441
18:33	MA33933-CCVA4	101.775	100.33	99.354	97.071
18:38	MA33933-CCB4	102.127	102.066	102.473	102.208
18:43	MA33933-CRIB2	102.973	101.815	102.702	102.923
18:49	MP79249-MB1	102.026	99.885	102.645	101.692
18:54	MP79249-LC1	102.993	102.015	101.5	101.757
19:00	MP79249-S1	103.48	103.421	104.531	103.89
19:05	MP79249-S2	103.685	102.568	103.453	103.963
19:10	ZZZZZZ	103.405	101.812	100.452	102.617
19:16	FA14479-1	103.192	103.084	102.763	103.858
19:21	MP79249-SD1	102.786	103.234	103.611	105.388
19:26	ZZZZZZ	102.313	101.82	102.153	101.489
19:32	MA33933-CCVA5	100.463	98.878	98.499	97.994
19:37	MA33933-CCB5	100.078	100.34	100.96	101.136
19:42	FA14479-1F	No results reported for the elements associated with this internal standard.			
19:48	MP79249-PS1	No results reported for the elements associated with this internal standard.			
19:53	ZZZZZZ	101.089	100.935	99.696	101.47
19:59	ZZZZZZ	101.2	95.517	99.946	96.331
20:04	ZZZZZZ	95.917	100.089	96.274	101.47
20:09	ZZZZZZ	100.507	101.102	98.944	100.781
20:15	MA33933-CCVA6	93.452	98.541	92.113	95.351
20:20	MA33933-CCB6	101.392	100.476	101.026	100.683
20:25	MA33933-CRIB3	101.999	100.787	102.213	99.912
20:31	MA33933-CCVA7	99.555	100.859	97.074	96.881
20:36	MA33933-CCB7	99.394	100.673	100.052	100.08
20:41	ZZZZZZ	103.346	102.942	102.167	102.849
20:47	ZZZZZZ	100.722	100.68	101.46	100.264
20:52	ZZZZZZ	99.74	101.055	98.863	100.054

! = Outside limits.

LEGEND: Istd#	Parameter	Limits	CCV/CCB Limits
Istd#17	Holmium (165-1)	70-130 %	70-130 %
Istd#18	Holmium (165-2)	70-130 %	70-130 %
Istd#19	Bismuth (209-1)	70-130 %	70-130 %

INTERNAL STANDARD SUMMARY

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050214M2L.CSV Date Analyzed: 05/02/14 Methods: SW846 6020A
Analyst: SB Run ID: MA33933
Parameters: Na

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20
Istd#20 Bismuth (209-2)			70-130 %	70-130 %	

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050214M2L.CSV Date Analyzed: 05/02/14 Methods: SW846 6020A
QC Limits: result < LOD Run ID: MA33933 Units: ug/l

Time: / Sample ID: / Metal	RL	IDL	LOD	16:44 ICB1 raw	16:44 ICB1 final	17:00 CCB1 raw	17:00 CCB1 final	17:28 CCB2 raw	17:28 CCB2 final
Aluminum	25	.072	20						
Antimony	0.50	.043	0.50						
Arsenic	0.50	.013	0.40						
Barium	1.0	.02	0.50						
Beryllium	0.50	.0046	0.25						
Boron	5.0	.91	2.5						
Cadmium	0.50	.0035	0.30						
Calcium	250	.95	50						
Chromium	1.0	.0092	0.50						
Cobalt	0.50	.0031	0.25						
Copper	1.0	.013	0.50						
Iron	25	1.1	13						
Lead	0.50	.0052	0.25						
Magnesium	250	.11	130						
Manganese	1.0	.014	0.50						
Molybdenum	1.0	.0077	0.50						
Nickel	1.0	.019	1.0						
Potassium	250	2.2	50						
Selenium	0.50	.018	0.50						
Silver	0.50	.0037	0.25						
Sodium	250	1.2	50	-3.4	<250	-4.1	<250	-7.9	<250
Strontium	5.0	.0043	2.5						
Thallium	0.50	.026	0.35						
Tin	5.0	.036	2.5						
Titanium	1.0	.028	0.50						
Vanadium	1.0	.04	0.50						
Zinc	2.0	.1	1.5						

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050214M2L.CSV Date Analyzed: 05/02/14 Methods: SW846 6020A
QC Limits: result < LOD Run ID: MA33933 Units: ug/l

Time: / Sample ID:				17:39 CCB3		18:38 CCB4		19:37 CCB5	
Metal	RL	IDL	LOD	raw	final	raw	final	raw	final
Aluminum	25	.072	20						
Antimony	0.50	.043	0.50						
Arsenic	0.50	.013	0.40						
Barium	1.0	.02	0.50						
Beryllium	0.50	.0046	0.25						
Boron	5.0	.91	2.5						
Cadmium	0.50	.0035	0.30						
Calcium	250	.95	50						
Chromium	1.0	.0092	0.50						
Cobalt	0.50	.0031	0.25						
Copper	1.0	.013	0.50						
Iron	25	1.1	13						
Lead	0.50	.0052	0.25						
Magnesium	250	.11	130						
Manganese	1.0	.014	0.50						
Molybdenum	1.0	.0077	0.50						
Nickel	1.0	.019	1.0						
Potassium	250	2.2	50						
Selenium	0.50	.018	0.50						
Silver	0.50	.0037	0.25						
Sodium	250	1.2	50	-7.4	<250	-4.1	<250	-6.1	<250
Strontium	5.0	.0043	2.5						
Thallium	0.50	.026	0.35						
Tin	5.0	.036	2.5						
Titanium	1.0	.028	0.50						
Vanadium	1.0	.04	0.50						
Zinc	2.0	.1	1.5						

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050214M2L.CSV Date Analyzed: 05/02/14 Methods: SW846 6020A
QC Limits: result < LOD Run ID: MA33933 Units: ug/l

Time: / Sample ID:				20:20 CCB6		20:36 CCB7	
Metal	RL	IDL	LOD	raw	final	raw	final
Aluminum	25	.072	20				
Antimony	0.50	.043	0.50				
Arsenic	0.50	.013	0.40				
Barium	1.0	.02	0.50				
Beryllium	0.50	.0046	0.25				
Boron	5.0	.91	2.5				
Cadmium	0.50	.0035	0.30				
Calcium	250	.95	50				
Chromium	1.0	.0092	0.50				
Cobalt	0.50	.0031	0.25				
Copper	1.0	.013	0.50				
Iron	25	1.1	13				
Lead	0.50	.0052	0.25				
Magnesium	250	.11	130				
Manganese	1.0	.014	0.50				
Molybdenum	1.0	.0077	0.50				
Nickel	1.0	.019	1.0				
Potassium	250	2.2	50				
Selenium	0.50	.018	0.50				
Silver	0.50	.0037	0.25				
Sodium	250	1.2	50	-6.7	<250	-7.4	<250
Strontium	5.0	.0043	2.5				
Thallium	0.50	.026	0.35				
Tin	5.0	.036	2.5				
Titanium	1.0	.028	0.50				
Vanadium	1.0	.04	0.50				
Zinc	2.0	.1	1.5				

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050214M2L.CSV Date Analyzed: 05/02/14 Methods: SW846 6020A
QC Limits: 90 to 110 % Recovery Run ID: MA33933 Units: ug/l

Time:		16:39			16:55			17:23	
Sample ID:	ICVA	ICVA1		CCVA	CCVA1		CCVA	CCVA2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Boron									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead	anr								
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver									
Sodium	5500	5360	97.5	5000	5120	102.4	5000	5230	104.6
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

12.2.3
12

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050214M2L.CSV Date Analyzed: 05/02/14 Methods: SW846 6020A
QC Limits: 90 to 110 % Recovery Run ID: MA33933 Units: ug/l

Time:		17:34			18:33			19:32	
Sample ID:	CCVA	CCVA3		CCVA	CCVA4		CCVA	CCVA5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Boron									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead	anr								
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver									
Sodium	5000	5050	101.0	5000	5090	101.8	5000	5110	102.2
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

12.2.3
12

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050214M2L.CSV Date Analyzed: 05/02/14 Methods: SW846 6020A
QC Limits: 90 to 110 % Recovery Run ID: MA33933 Units: ug/l

Time:		20:15			20:31	
Sample ID:	CCVA	CCVA6		CCVA	CCVA7	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Boron						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead	anr					
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium						
Silver						
Sodium	5000	5410	108.2	5000	5130	102.6
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

(*) Outside of QC limits
(anr) Analyte not requested

12.2.3
12

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050214M2L.CSV Date Analyzed: 05/02/14 Methods: SW846 6020A
QC Limits: 80 to 120 % Recovery Run ID: MA33933 Units: ug/l

Time:		16:50		18:43		20:25	
Sample ID:	CRIB	CRIB1		CRIB2		CRIB3	
Metal	True	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	25						
Antimony	0.50						
Arsenic	0.50						
Barium	1.0						
Beryllium	0.50						
Boron	5.0						
Cadmium	0.50						
Calcium	250						
Chromium	1.0						
Cobalt	0.50						
Copper	1.0						
Iron	25						
Lead	0.50						
Magnesium	250						
Manganese	0.50						
Molybdenum	1.0						
Nickel	1.0						
Potassium	250						
Selenium	0.50						
Silver	0.50						
Sodium	250	247	98.8	240	96.0	240	96.0
Strontium	5.0						
Thallium	0.50						
Tin	5.0						
Titanium	1.0						
Vanadium	1.0						
Zinc	2.0						

(*) Outside of QC limits
(anr) Analyte not requested

12.2.4
12

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050214M2L.CSV Date Analyzed: 05/02/14 Methods: SW846 6020A
QC Limits: 80 to 120 % Recovery Run ID: MA33933 Units: ug/l

Time: / Sample ID: / Metal	ICSA True	ICSAB True	17:06 ICSA1 Results	% Rec	17:12 ICSAB1 Results	% Rec
Aluminum	100000	100000	92800	92.8	90700	90.7
Antimony			0.028		0.032	
Arsenic		20	0.032		19.0	95.0
Barium			0.096		0.11	
Beryllium			0.0098		0.012	
Boron			1.6		0.93	
Cadmium		20	0.36		18.8	94.0
Calcium	100000	100000	94600	94.6	93600	93.6
Chromium		20	1.2		19.9	99.5
Cobalt		20	0.0036		18.4	92.0
Copper		20	0.48		18.1	90.5
Iron	100000	100000	96800	96.8	95700	95.7
Lead			0.19		0.19	
Magnesium	100000	100000	93800	93.8	92500	92.5
Manganese		20	0.54		19.3	96.5
Molybdenum	2000	2000	2160	108.0	2150	107.5
Nickel		20	0.16		18.0	90.0
Potassium	100000	100000	94900	94.9	93400	93.4
Selenium			0.0082		-0.010	
Silver		20	0.018		18.5	92.5
Sodium	100000	100000	95100	95.1	92300	92.3
Strontium			0.58		0.56	
Thallium			0.032		0.014	
Tin			0.072		0.049	
Titanium	2000	2000	1990	99.5	1970	98.5
Vanadium			-0.0079		-0.0099	
Zinc		20	0.78		18.1	90.5

(*) Outside of QC limits
(anr) Analyte not requested

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050514M2L.CSV Date Analyzed: 05/05/14 Methods: SW846 6020A
Analyst: SB Run ID: MA33940
Parameters: Na

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:58	MA33940-STD1	1		STDA
12:04	MA33940-STD2	1		STDA
12:09	MA33940-STD3	1		STDA
12:16	MA33940-STD4	1		STDA
12:21	MA33940-STD5	1		STDA
12:29	MA33940-STD6	1		STDA
12:35	MA33940-STD7	1		STDB
12:40	MA33940-STD8	1		STDC
12:46	MA33940-STD9	1		STDD
12:51	MA33940-STD10	1		STDE
12:56	MA33940-STD11	1		STDF
13:02	MA33940-STD12	1		STDG
13:07	MA33940-STD13	1		STDH
13:12	MA33940-STD14	1		STDI
13:18	MA33940-STD15	1		STDJ
13:28	MA33940-ICVA1	1		
13:36	MA33940-ICB1	1		
13:43	MA33940-CRIB1	1		
13:49	MA33940-CCVA1	1		
13:55	MA33940-CCB1	1		
14:00	MA33940-ICSA1	1		
14:08	MA33940-ICSAB1	1		
14:15	ZZZZZZ	1		
14:20	MA33940-CCVA2	1		
14:26	MA33940-CCB2	1		
14:31	MP79254A-MB1	5		
14:36	ZZZZZZ	50		
14:49	ZZZZZZ	25		
14:56	MP79254A-B1	50		
15:03	ZZZZZZ	1		
15:09	ZZZZZZ	5		
15:14	ZZZZZZ	5		
15:20	ZZZZZZ	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050514M2L.CSV Date Analyzed: 05/05/14 Methods: SW846 6020A
Analyst: SB Run ID: MA33940
Parameters: Na

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:25	MA33940-CCVA3	1		
15:31	MA33940-CCB3	1		
15:36	ZZZZZZ	25		
15:42	ZZZZZZ	25		
15:47	ZZZZZZ	50		
15:52	ZZZZZZ	1		
15:58	ZZZZZZ	1		
16:03	ZZZZZZ	1		
16:09	MA33940-CCVA4	1		
16:21	MA33940-CCB4	1		
16:26	ZZZZZZ	25		
16:32	ZZZZZZ	50		
16:37	ZZZZZZ	1		
16:42	ZZZZZZ	2		
16:47	ZZZZZZ	1		
16:53	ZZZZZZ	10		
16:58	ZZZZZZ	1		
17:03	ZZZZZZ	25		
17:09	ZZZZZZ	1		
17:16	MA33940-CCVA5	1		
17:21	MA33940-CCB5	1		
17:29	MA33940-CRIB2	1		
17:35	ZZZZZZ	2		
17:41	FA14479-1F	500		
17:46	MP79249-PS1	500		
---------->	Last reportable sample/prep for job FA14479			
17:51	ZZZZZZ	1		
17:57	ZZZZZZ	1		
18:02	MA33940-CCVA6	1		
18:07	MA33940-CCB6	1		
18:13	MA33940-CRIB3	1		
18:27	MA33940-CCVA7	1		
18:32	MA33940-CCB7	1		
---------->	Last reportable CCB for job FA14479			
18:38	ZZZZZZ	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050514M2L.CSV Date Analyzed: 05/05/14 Methods: SW846 6020A
Analyst: SB Run ID: MA33940
Parameters: Na

Time	Sample Description	Dilution Factor	PS Recov	Comments
18:43	ZZZZZZ	1		
18:48	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050514M2L.CSV Date Analyzed: 05/05/14 Methods: SW846 6020A
Analyst: SB Run ID: MA33940
Parameters: Na

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
11:58	MA33940-STD1	100	100	100	100	100	100	100	100
12:04	MA33940-STD2	100	100	100	100	100	100	100	100
12:09	MA33940-STD3	100	100	100	100	100	100	100	100
12:16	MA33940-STD4	100	100	100	100	100	100	100	100
12:21	MA33940-STD5	100	100	100	100	100	100	100	100
12:29	MA33940-STD6	100	100	100	100	100	100	100	100
12:35	MA33940-STD7	100	100	100	100	100	100	100	100
12:40	MA33940-STD8	99.942	99.379	101.805	100.096	99.698	100.895	100.938	99.228
12:46	MA33940-STD9	99.029	98.691	98.747	98.666	99.58	98.495	99.305	99.056
12:51	MA33940-STD10	98.192	96.707	96.727	95.675	97.252	97.531	95.631	97.461
12:56	MA33940-STD11	95.159	95.087	93.485	94.186	95.366	93.675	95.534	95.47
13:02	MA33940-STD12	94.799	96.474	96.229	96.357	94.944	95.355	97.084	95.028
13:07	MA33940-STD13	98.663	98.098	98.81	96.416	97.493	96.982	97.123	96.754
13:12	MA33940-STD14	98.066	97.991	98.005	96.576	96.193	96.302	96.072	95.952
13:18	MA33940-STD15	100.565	103.611	96.776	97.029	99.712	95.25	95.763	99.388
13:28	MA33940-ICVA1	94.801	95.215	93.897	93.095	94.255	93.921	93.686	93.815
13:36	MA33940-ICB1	96.092	95.142	96.105	96.281	95.2	97.193	96.645	94.676
13:43	MA33940-CRIB1	97.381	97.141	96.913	96.481	95.481	95.756	96.183	95.408
13:49	MA33940-CCVA1	95.125	94.959	93.049	92.218	94.148	92.039	92.119	93.661
13:55	MA33940-CCB1	100.337	101.605	96.537	95.024	100.009	94.588	96.67	99.411
14:00	MA33940-ICSA1	89.845	91.251	84.296	88.353	89.748	83.366	88.921	86.608
14:08	MA33940-ICSAB1	89.551	90.311	89.013	89.643	89.708	88.05	89.554	85.841
14:15	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:20	MA33940-CCVA2	90.574	89.905	87.306	89.612	91.349	87.563	90.936	91.234
14:26	MA33940-CCB2	92.986	93.047	89.782	91.567	92.424	89.557	92.386	91.924
14:31	MP79254A-MB1	95.061	93.33	90.253	93.754	93.94	92.093	94.65	93.47
14:36	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:49	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:56	MP79254A-B1	99.622	99.097	94.935	97.809	96.567	96.08	97.637	96.671
15:03	ZZZZZZ	No results reported for the elements associated with this internal standard.							
15:09	ZZZZZZ	94.031	96.81	90.113	91.354	92.644	89.993	88.296	91.441
14:14	ZZZZZZ	92.21	92.716	86.463	89.874	91.783	86.736	89.78	90.271
15:20	ZZZZZZ	No results reported for the elements associated with this internal standard.							

INTERNAL STANDARD SUMMARY

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050514M2L.CSV Date Analyzed: 05/05/14 Methods: SW846 6020A
Analyst: SB Run ID: MA33940
Parameters: Na

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
15:25	MA33940-CCVA3	97.154	96.889	90.766	93.221	95.169	90.616	92.047	94.982
15:31	MA33940-CCB3	95.052	92.712	89.901	92.35	91.548	91.08	92.026	91.986
15:36	ZZZZZZ	No results reported for the elements associated with this internal standard.							
15:42	ZZZZZZ	No results reported for the elements associated with this internal standard.							
15:47	ZZZZZZ	98.28	94.967	92.207	94.966	94.348	92.728	95.582	94.435
15:52	ZZZZZZ	No results reported for the elements associated with this internal standard.							
15:58	ZZZZZZ	No results reported for the elements associated with this internal standard.							
16:03	ZZZZZZ	No results reported for the elements associated with this internal standard.							
16:09	MA33940-CCVA4	105.368	100.68	94.033	96.281	99.178	94.037	96.791	100.063
16:21	MA33940-CCB4	101.001	99.418	98.493	95.846	97.634	97.92	96.82	97.221
16:26	ZZZZZZ	103.088	100.027	95.362	97	97.83	96.921	97.318	97.8
16:32	ZZZZZZ	No results reported for the elements associated with this internal standard.							
16:37	ZZZZZZ	No results reported for the elements associated with this internal standard.							
16:42	ZZZZZZ	No results reported for the elements associated with this internal standard.							
16:47	ZZZZZZ	No results reported for the elements associated with this internal standard.							
16:53	ZZZZZZ	99.062	97.231	90.591	92.648	94.989	91.904	92.891	94.805
16:58	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:03	ZZZZZZ	100.793	97.649	91.144	93.268	95.363	93.293	96.085	94.962
17:09	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:16	MA33940-CCVA5	100.819	100.082	95.185	97.069	97.878	94.336	95.956	97.496
17:21	MA33940-CCB5	100.247	95.686	91.85	94.588	94.231	93.274	94.974	94.711
17:29	MA33940-CRIB2	98.993	96.796	92.879	94.624	95.578	93.479	95.172	94.687
17:35	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:41	FA14479-1F	100.65	100.269	96.206	99.18	98.725	97.687	99.115	98.441
17:46	MP79249-PS1	104.062	101.266	97.239	98.864	98.787	98.951	99.22	98.347
17:51	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:57	ZZZZZZ	No results reported for the elements associated with this internal standard.							
18:02	MA33940-CCVA6	101.194	98.636	93.355	94.273	96.547	93.444	94.286	95.781
18:07	MA33940-CCB6	101.301	97.058	87.098	94.532	94.951	87.058	94.431	94.44
18:13	MA33940-CRIB3	99.568	97.337	94.532	95.135	95.507	94.669	95.984	94.973
18:27	MA33940-CCVA7	99.973	98.3	92.928	95.185	96.007	93.707	94.556	95.486
18:32	MA33940-CCB7	99.19	94.849	93.748	94.904	94.07	94.726	95.788	94.358
18:38	ZZZZZZ	No results reported for the elements associated with this internal standard.							

INTERNAL STANDARD SUMMARY

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050514M2L.CSV Date Analyzed: 05/05/14 Methods: SW846 6020A
Analyst: SB Run ID: MA33940
Parameters: Na

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
18:43	ZZZZZZ	No results reported for the elements associated with this internal standard.							
18:48	ZZZZZZ	No results reported for the elements associated with this internal standard.							

! = Outside limits.

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#1	Lithium	70-130 %	70-130 %
Istd#2	Scandium (45-1)	70-130 %	70-130 %
Istd#3	Scandium (45-2)	70-130 %	70-130 %
Istd#4	Scandium (45-3)	70-130 %	70-130 %
Istd#5	Germanium (72-1)	70-130 %	70-130 %
Istd#6	Germanium (72-2)	70-130 %	70-130 %
Istd#7	Germanium (72-3)	70-130 %	70-130 %
Istd#8	Germanium (74-1)	70-130 %	70-130 %

INTERNAL STANDARD SUMMARY

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050514M2L.CSV Date Analyzed: 05/05/14 Methods: SW846 6020A
Analyst: SB Run ID: MA33940
Parameters: Na

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
11:58	MA33940-STD1	100	100	100	100	100	100	100	100
12:04	MA33940-STD2	100	100	100	100	100	100	100	100
12:09	MA33940-STD3	100	100	100	100	100	100	100	100
12:16	MA33940-STD4	100	100	100	100	100	100	100	100
12:21	MA33940-STD5	100	100	100	100	100	100	100	100
12:29	MA33940-STD6	100	100	100	100	100	100	100	100
12:35	MA33940-STD7	100	100	100	100	100	100	100	100
12:40	MA33940-STD8	100.65	101.142	100.212	99.575	99.732	99.983	99.471	100.898
12:46	MA33940-STD9	98.058	98.643	101.347	99.024	98.699	98.37	98.784	100.803
12:51	MA33940-STD10	95.325	96.549	98.125	95.391	97.695	96.459	98.043	98.685
12:56	MA33940-STD11	92.865	94.802	98.692	94.867	97.452	94.409	98.471	97.428
13:02	MA33940-STD12	94.146	97.647	96.844	96.034	96.782	96.405	98.073	99.118
13:07	MA33940-STD13	96.959	98.139	99.79	97.118	97.892	98.406	99.08	100.574
13:12	MA33940-STD14	95.743	95.703	96.626	95.178	97.767	96.738	98.289	99.208
13:18	MA33940-STD15	95.396	95.081	100.003	94.432	101.013	95.625	103.13	100.619
13:28	MA33940-ICVA1	92.754	92.935	93.679	91.151	96.073	93.781	97.727	97.362
13:36	MA33940-ICB1	95.61	96.452	96.673	98.373	97.234	97.735	97.311	100.015
13:43	MA33940-CRIB1	95.35	96.746	98.189	97.261	98.18	98.392	98.239	100.197
13:49	MA33940-CCVA1	92.454	92.721	94.076	91.507	95.771	92.451	97.186	97.509
13:55	MA33940-CCB1	94.006	96.344	102.329	97.384	101.675	96.746	102.848	99.777
14:00	MA33940-ICSA1	82.12	85.242	84.711	78.809	88.024	82.011	94.016	89.34
14:08	MA33940-ICSAB1	86.707	86.841	83.089	83.739	88.106	85.224	94.283	93.122
14:15	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:20	MA33940-CCVA2	88.041	90.142	91.63	90.317	95.284	89.302	99.366	97.15
14:26	MA33940-CCB2	89.237	92.468	96.289	96.041	97.236	92.574	100.212	99.467
14:31	MP79254A-MB1	90.811	94.474	97.846	95.253	98.751	93.314	101.412	99.868
14:36	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:49	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:56	MP79254A-B1	95.359	96.311	101.043	98.32	101.285	96.673	102.577	102.866
15:03	ZZZZZZ	No results reported for the elements associated with this internal standard.							
15:09	ZZZZZZ	84.935	86.945	91.53	88.499	93.713	85.714	101.665	96.153
15:14	ZZZZZZ	87.117	89.392	91.8	89.811	94.502	88.983	100.811	96.839
15:20	ZZZZZZ	No results reported for the elements associated with this internal standard.							

INTERNAL STANDARD SUMMARY

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050514M2L.CSV Date Analyzed: 05/05/14 Methods: SW846 6020A
Analyst: SB Run ID: MA33940
Parameters: Na

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
15:25	MA33940-CCVA3	91.756	93.753	97.226	94.24	98.595	91.713	103.683	101.262
15:31	MA33940-CCB3	90.593	93.085	96.972	95.208	98.061	93.095	101.838	100.468
15:36	ZZZZZZ	No results reported for the elements associated with this internal standard.							
15:42	ZZZZZZ	No results reported for the elements associated with this internal standard.							
15:47	ZZZZZZ	92.009	95.174	98.896	97.671	101.108	95.938	105.211	104.57
15:52	ZZZZZZ	No results reported for the elements associated with this internal standard.							
15:58	ZZZZZZ	No results reported for the elements associated with this internal standard.							
16:03	ZZZZZZ	No results reported for the elements associated with this internal standard.							
16:09	MA33940-CCVA4	94.705	95.412	101.458	97.684	102.608	94.427	106.387	102.378
16:21	MA33940-CCB4	95.775	96.78	100.733	102.344	102.337	98.474	104.631	104.911
16:26	ZZZZZZ	94.527	95.744	99.563	98.413	100.81	95.332	105.406	102.381
16:32	ZZZZZZ	No results reported for the elements associated with this internal standard.							
16:37	ZZZZZZ	No results reported for the elements associated with this internal standard.							
16:42	ZZZZZZ	No results reported for the elements associated with this internal standard.							
16:47	ZZZZZZ	No results reported for the elements associated with this internal standard.							
16:53	ZZZZZZ	89.079	92.16	96.386	95.921	99.775	93.037	104.636	102.223
16:58	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:03	ZZZZZZ	92.406	94.252	100.343	97.615	102.255	95.121	103.826	102.797
17:09	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:16	MA33940-CCVA5	94.162	94.529	99.116	95.805	100.777	93.842	105.594	102.87
17:21	MA33940-CCB5	92.216	95.645	99.089	97.847	100.324	94.416	103.705	102.055
17:29	MA33940-CRIB2	93.451	94.895	98.793	97.865	99.785	95.081	104.107	102.494
17:35	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:41	FA14479-1F	94.949	98.339	100.201	100.32	102.942	98.456	106.9	103.489
17:46	MP79249-PS1	98.915	98.242	101.506	100.141	103.366	99.82	106.499	105.519
17:51	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:57	ZZZZZZ	No results reported for the elements associated with this internal standard.							
18:02	MA33940-CCVA6	93.404	94.617	97.473	95.438	99.118	92.722	103.568	102.236
18:07	MA33940-CCB6	87.67	95.787	99.089	90.801	100.134	88.626	104.219	95.557
18:13	MA33940-CRIB3	94.998	95.553	99.559	98.72	100.461	95.934	104.31	102.649
18:27	MA33940-CCVA7	91.806	94.114	96.516	93.936	98.24	93.34	103.121	100.287
18:32	MA33940-CCB7	92.21	95.046	98.811	97.551	99.892	96.27	103.93	102.542
18:38	ZZZZZZ	No results reported for the elements associated with this internal standard.							

INTERNAL STANDARD SUMMARY

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050514M2L.CSV Date Analyzed: 05/05/14 Methods: SW846 6020A
Analyst: SB Run ID: MA33940
Parameters: Na

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
18:43	ZZZZZZ	No results reported for the elements associated with this internal standard.							
18:48	ZZZZZZ	No results reported for the elements associated with this internal standard.							

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#9	Germanium (74-2)	70-130 %	70-130 %
Istd#10	Germanium (74-3)	70-130 %	70-130 %
Istd#11	Rhodium (103-1)	70-130 %	70-130 %
Istd#12	Rhodium (103-2)	70-130 %	70-130 %
Istd#13	Indium (115-1)	70-130 %	70-130 %
Istd#14	Indium (115-2)	70-130 %	70-130 %
Istd#15	Terbium (159-1)	70-130 %	70-130 %
Istd#16	Terbium (159-2)	70-130 %	70-130 %

INTERNAL STANDARD SUMMARY

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050514M2L.CSV Date Analyzed: 05/05/14 Methods: SW846 6020A
Analyst: SB Run ID: MA33940
Parameters: Na

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20
11:58	MA33940-STD1	100	100	100	100
12:04	MA33940-STD2	100	100	100	100
12:09	MA33940-STD3	100	100	100	100
12:16	MA33940-STD4	100	100	100	100
12:21	MA33940-STD5	100	100	100	100
12:29	MA33940-STD6	100	100	100	100
12:35	MA33940-STD7	100	100	100	100
12:40	MA33940-STD8	99.241	101.053	100.306	99.691
12:46	MA33940-STD9	99.208	99.146	100.316	100.595
12:51	MA33940-STD10	100.069	98.195	100.404	99.429
12:56	MA33940-STD11	99.577	98.624	99.629	97.622
13:02	MA33940-STD12	99.755	97.485	99.598	98.183
13:07	MA33940-STD13	100.214	99.273	98.75	100.637
13:12	MA33940-STD14	99.61	99.143	98.344	98.032
13:18	MA33940-STD15	103.878	99.675	99.168	96.776
13:28	MA33940-ICVA1	97.595	96.972	96.435	95.334
13:36	MA33940-ICB1	98.297	100.278	98.038	100.915
13:43	MA33940-CRIB1	99.25	100.093	99.489	100.401
13:49	MA33940-CCVA1	98.566	97.334	95.679	95.883
13:55	MA33940-CCB1	104.572	99.987	103.364	99.993
14:00	MA33940-ICSA1	94.841	88.902	87.344	82.583
14:08	MA33940-ICSAB1	95.698	94.666	86.718	86.955
14:15	ZZZZZZ	No results reported for the elements associated with this internal standard.			
14:20	MA33940-CCVA2	101.091	99.097	97.58	96.682
14:26	MA33940-CCB2	100.943	99.799	101.259	101.87
14:31	MP79254A-MB1	102.025	99.556	102.983	103.13
14:36	ZZZZZZ	No results reported for the elements associated with this internal standard.			
14:49	ZZZZZZ	No results reported for the elements associated with this internal standard.			
14:56	MP79254A-B1	104.894	103.184	104.214	103.304
15:03	ZZZZZZ	No results reported for the elements associated with this internal standard.			
15:09	ZZZZZZ	101.588	96.662	98.485	95.21
15:14	ZZZZZZ	102.158	98.33	222.219 !a	219.744 !a
15:20	ZZZZZZ	No results reported for the elements associated with this internal standard.			

INTERNAL STANDARD SUMMARY

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050514M2L.CSV Date Analyzed: 05/05/14 Methods: SW846 6020A
Analyst: SB Run ID: MA33940
Parameters: Na

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20
15:25	MA33940-CCVA3	105.168	101.674	102.087	100.068
15:31	MA33940-CCB3	103.804	101.671	103.366	102.136
15:36	ZZZZZZ	No results reported for the elements associated with this internal standard.			
15:42	ZZZZZZ	No results reported for the elements associated with this internal standard.			
15:47	ZZZZZZ	106.183	104.958	112.648	113.158
15:52	ZZZZZZ	No results reported for the elements associated with this internal standard.			
15:58	ZZZZZZ	No results reported for the elements associated with this internal standard.			
16:03	ZZZZZZ	No results reported for the elements associated with this internal standard.			
16:09	MA33940-CCVA4	107.026	105.283	104.471	101.795
16:21	MA33940-CCB4	105.249	105.555	104.115	106.391
16:26	ZZZZZZ	106.238	103.448	105.043	104.207
16:32	ZZZZZZ	No results reported for the elements associated with this internal standard.			
16:37	ZZZZZZ	No results reported for the elements associated with this internal standard.			
16:42	ZZZZZZ	No results reported for the elements associated with this internal standard.			
16:47	ZZZZZZ	No results reported for the elements associated with this internal standard.			
16:53	ZZZZZZ	105.687	103.626	158.746 !a	161.858 !a
16:58	ZZZZZZ	No results reported for the elements associated with this internal standard.			
17:03	ZZZZZZ	107.477	104.586	121.002	123.813
17:09	ZZZZZZ	No results reported for the elements associated with this internal standard.			
17:16	MA33940-CCVA5	108.254	104.642	103.535	101.721
17:21	MA33940-CCB5	104.89	102.867	104.582	103.38
17:29	MA33940-CRIB2	104.865	102.685	104.709	104.753
17:35	ZZZZZZ	No results reported for the elements associated with this internal standard.			
17:41	FA14479-1F	108.453	105.371	106.745	107.717
17:46	MP79249-PS1	107.765	106.081	106.83	108.659
17:51	ZZZZZZ	No results reported for the elements associated with this internal standard.			
17:57	ZZZZZZ	No results reported for the elements associated with this internal standard.			
18:02	MA33940-CCVA6	106.51	102.942	102.556	101.21
18:07	MA33940-CCB6	104.893	96.541	104.445	97.171
18:13	MA33940-CRIB3	106.075	103.964	105.008	104.95
18:27	MA33940-CCVA7	105.01	102.009	100.399	100.575
18:32	MA33940-CCB7	106.005	103.027	102.567	104.318
18:38	ZZZZZZ	No results reported for the elements associated with this internal standard.			

INTERNAL STANDARD SUMMARY

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050514M2L.CSV Date Analyzed: 05/05/14 Methods: SW846 6020A
Analyst: SB Run ID: MA33940
Parameters: Na

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20
18:43	ZZZZZZ	No results reported for the elements associated with this internal standard.			
18:48	ZZZZZZ	No results reported for the elements associated with this internal standard.			

! = Outside limits.

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#17	Holmium (165-1)	70-130 %	70-130 %
Istd#18	Holmium (165-2)	70-130 %	70-130 %
Istd#19	Bismuth (209-1)	70-130 %	70-130 %
Istd#20	Bismuth (209-2)	70-130 %	70-130 %

(a) No samples reported for the elements associated with this internal standard.

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050514M2L.CSV Date Analyzed: 05/05/14 Methods: SW846 6020A
QC Limits: result < LOD Run ID: MA33940 Units: ug/l

Time: / Sample ID:				13:36 ICB1		13:55 CCB1		14:26 CCB2	
Metal	RL	IDL	LOD	raw	final	raw	final	raw	final
Aluminum	25	.072	20						
Antimony	0.50	.043	0.50						
Arsenic	0.50	.013	0.40						
Barium	1.0	.02	0.50						
Beryllium	0.50	.0046	0.25						
Boron	5.0	.91	2.5						
Cadmium	0.50	.0035	0.30						
Calcium	250	.95	50						
Chromium	1.0	.0092	0.50						
Cobalt	0.50	.0031	0.25						
Copper	1.0	.013	0.50						
Iron	25	1.1	13						
Lead	0.50	.0052	0.25						
Magnesium	250	.11	130						
Manganese	1.0	.014	0.50						
Molybdenum	1.0	.0077	0.50						
Nickel	1.0	.019	1.0						
Potassium	250	2.2	50						
Selenium	0.50	.018	0.50						
Silver	0.50	.0037	0.25						
Sodium	250	1.2	50	-7.0	<250	-9.5	<250	-12	<250
Strontium	5.0	.0043	2.5						
Thallium	0.50	.026	0.35						
Tin	5.0	.036	2.5						
Titanium	1.0	.028	0.50						
Vanadium	1.0	.04	0.50						
Zinc	2.0	.1	1.5						

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050514M2L.CSV Date Analyzed: 05/05/14 Methods: SW846 6020A
QC Limits: result < LOD Run ID: MA33940 Units: ug/l

Time: / Sample ID:				15:31 CCB3		16:21 CCB4		17:21 CCB5	
Metal	RL	IDL	LOD	raw	final	raw	final	raw	final
Aluminum	25	.072	20						
Antimony	0.50	.043	0.50						
Arsenic	0.50	.013	0.40						
Barium	1.0	.02	0.50						
Beryllium	0.50	.0046	0.25						
Boron	5.0	.91	2.5						
Cadmium	0.50	.0035	0.30						
Calcium	250	.95	50						
Chromium	1.0	.0092	0.50						
Cobalt	0.50	.0031	0.25						
Copper	1.0	.013	0.50						
Iron	25	1.1	13						
Lead	0.50	.0052	0.25						
Magnesium	250	.11	130						
Manganese	1.0	.014	0.50						
Molybdenum	1.0	.0077	0.50						
Nickel	1.0	.019	1.0						
Potassium	250	2.2	50						
Selenium	0.50	.018	0.50						
Silver	0.50	.0037	0.25						
Sodium	250	1.2	50	-11	<250	-11	<250	-11	<250
Strontium	5.0	.0043	2.5						
Thallium	0.50	.026	0.35						
Tin	5.0	.036	2.5						
Titanium	1.0	.028	0.50						
Vanadium	1.0	.04	0.50						
Zinc	2.0	.1	1.5						

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050514M2L.CSV Date Analyzed: 05/05/14 Methods: SW846 6020A
QC Limits: result < LOD Run ID: MA33940 Units: ug/l

Time: / Sample ID:				18:07 CCB6		18:32 CCB7	
Metal	RL	IDL	LOD	raw	final	raw	final
Aluminum	25	.072	20				
Antimony	0.50	.043	0.50				
Arsenic	0.50	.013	0.40				
Barium	1.0	.02	0.50				
Beryllium	0.50	.0046	0.25				
Boron	5.0	.91	2.5				
Cadmium	0.50	.0035	0.30				
Calcium	250	.95	50				
Chromium	1.0	.0092	0.50				
Cobalt	0.50	.0031	0.25				
Copper	1.0	.013	0.50				
Iron	25	1.1	13				
Lead	0.50	.0052	0.25				
Magnesium	250	.11	130				
Manganese	1.0	.014	0.50				
Molybdenum	1.0	.0077	0.50				
Nickel	1.0	.019	1.0				
Potassium	250	2.2	50				
Selenium	0.50	.018	0.50				
Silver	0.50	.0037	0.25				
Sodium	250	1.2	50	-11	<250	-11	<250
Strontium	5.0	.0043	2.5				
Thallium	0.50	.026	0.35				
Tin	5.0	.036	2.5				
Titanium	1.0	.028	0.50				
Vanadium	1.0	.04	0.50				
Zinc	2.0	.1	1.5				

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050514M2L.CSV Date Analyzed: 05/05/14 Methods: SW846 6020A
QC Limits: 90 to 110 % Recovery Run ID: MA33940 Units: ug/l

Time:		13:28			13:49			14:20	
Sample ID:	ICVA	ICVA1		CCVA	CCVA1		CCVA	CCVA2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Boron									
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	anr								
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	5500	5640	102.5	5000	5260	105.2	5000	5250	105.0
Strontium	anr								
Thallium	anr								
Tin	anr								
Titanium	anr								
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

12.3.3
12

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050514M2L.CSV Date Analyzed: 05/05/14 Methods: SW846 6020A
QC Limits: 90 to 110 % Recovery Run ID: MA33940 Units: ug/l

Time:		15:25			16:09			17:16	
Sample ID:	CCVA	CCVA3		CCVA	CCVA4		CCVA	CCVA5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Boron									
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	anr								
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	5000	5230	104.6	5000	5370	107.4	5000	5240	104.8
Strontium	anr								
Thallium	anr								
Tin	anr								
Titanium	anr								
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050514M2L.CSV Date Analyzed: 05/05/14 Methods: SW846 6020A
QC Limits: 90 to 110 % Recovery Run ID: MA33940 Units: ug/l

Time:		18:02			18:27	
Sample ID:	CCVA	CCVA6		CCVA	CCVA7	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum	anr					
Antimony	anr					
Arsenic	anr					
Barium	anr					
Beryllium	anr					
Boron						
Cadmium	anr					
Calcium	anr					
Chromium	anr					
Cobalt	anr					
Copper	anr					
Iron	anr					
Lead	anr					
Magnesium	anr					
Manganese	anr					
Molybdenum	anr					
Nickel	anr					
Potassium	anr					
Selenium	anr					
Silver	anr					
Sodium	5000	5300	106.0	5000	5210	104.2
Strontium	anr					
Thallium	anr					
Tin	anr					
Titanium	anr					
Vanadium	anr					
Zinc	anr					

(*) Outside of QC limits
(anr) Analyte not requested

12.3.3
12

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050514M2L.CSV Date Analyzed: 05/05/14 Methods: SW846 6020A
QC Limits: 80 to 120 % Recovery Run ID: MA33940 Units: ug/l

Time:		13:43		17:29		18:13	
Sample ID:	CRIB	CRIB1		CRIB2		CRIB3	
Metal	True	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	25						
Antimony	0.50						
Arsenic	0.50						
Barium	1.0						
Beryllium	0.50						
Boron	5.0						
Cadmium	0.50						
Calcium	250						
Chromium	1.0						
Cobalt	0.50						
Copper	1.0						
Iron	25						
Lead	0.50						
Magnesium	250						
Manganese	0.50						
Molybdenum	1.0						
Nickel	1.0						
Potassium	250						
Selenium	0.50						
Silver	0.50						
Sodium	250	254	101.6	250	100.0	247	98.8
Strontium	5.0						
Thallium	0.50						
Tin	5.0						
Titanium	1.0						
Vanadium	1.0						
Zinc	2.0						

(*) Outside of QC limits
(anr) Analyte not requested

12.3.4
12

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA050514M2L.CSV Date Analyzed: 05/05/14 Methods: SW846 6020A
QC Limits: 80 to 120 % Recovery Run ID: MA33940 Units: ug/l

Time: / Sample ID: / Metal	ICSA True	ICSAB True	14:00 ICSA1 Results	% Rec	14:08 ICSAB1 Results	% Rec
Aluminum	100000	100000	96800	96.8	99800	99.8
Antimony			0.12		0.11	
Arsenic		20	0.041		19.5	97.5
Barium			0.099		0.083	
Beryllium			0.011		0.014	
Boron			2.0		1.5	
Cadmium		20	0.43		19.4	97.0
Calcium	100000	100000	97700	97.7	102000	102.0
Chromium		20	1.3		20.6	103.0
Cobalt		20	0.0085		18.9	94.5
Copper		20	0.50		18.4	92.0
Iron	100000	100000	101000	101.0	97200	97.2
Lead			0.19		0.19	
Magnesium	100000	100000	97200	97.2	99700	99.7
Manganese		20	0.52		19.8	99.0
Molybdenum	2000	2000	2160	108.0	2270	113.5
Nickel		20	0.13		18.4	92.0
Potassium	100000	100000	97900	97.9	101000	101.0
Selenium			0.025		0.032	
Silver		20	0.016		18.6	93.0
Sodium	100000	100000	98200	98.2	102000	102.0
Strontium			0.60		0.60	
Thallium			0.033		0.011	
Tin			0.079		0.058	
Titanium	2000	2000	1980	99.0	2070	103.5
Vanadium			-0.016		-0.015	
Zinc		20	0.96		18.4	92.0

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

QC Batch ID: MP79249
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date: 05/01/14

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	.14	3.6	4.4	<50
Antimony	4.0	.086	.12	0.24	<4.0
Arsenic	3.0	.026	.23	0.074	<3.0
Barium	2.0	.04	.2	0.095	<2.0
Beryllium	1.0	.0092	.026	-0.11	<1.0
Boron	10	1.8	1.3		
Cadmium	6.0	.007	.22	-0.0066	<6.0
Calcium	500	1.9	8.5	16.6	<500
Chromium	8.0	.018	.3	0.18	<8.0
Cobalt	1.0	.0062	.038	0.0030	<1.0
Copper	8.0	.027	.22	-0.045	<8.0
Iron	50	2.2	6.3	16.7	<50
Lead	3.0	.01	.027	0.030	<3.0
Magnesium	500	.21	2	2.4	<500
Manganese	4.0	.029	.11	0.26	<4.0
Molybdenum	2.0	.015	.17		
Nickel	8.0	.038	.062	0.083	<8.0
Potassium	500	4.4	7.8	-28	<500
Selenium	2.0	.035	.087	0.11	<2.0
Silver	2.0	.0074	.1	0.0098	<2.0
Sodium	500	2.3	9.9	-7.8	<500
Strontium	20	.0086	.028		
Thallium	2.0	.053	.17	0.081	<2.0
Tin	10	.072	.25		
Titanium	2.0	.055	.42		
Vanadium	3.0	.079	.23	0.32	<3.0
Zinc	8.0	.21	.93	1.1	<8.0

Associated samples MP79249: FA14479-1, FA14479-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

QC Batch ID: MP79249
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date: 05/01/14

Metal	FA14479-1 Original	MS	Spikelot MPIRW1	% Rec	QC Limits
Aluminum	10.3	2150	2000	107.0	75-125
Antimony	0.25	566	500	113.2	75-125
Arsenic	0.50	2020	2000	101.0	75-125
Barium	13.0	2080	2000	103.4	75-125
Beryllium	0.0	50.8	50	101.6	75-125
Boron					
Cadmium	0.0	48.3	50	96.6	75-125
Calcium	322000	351000	25000	116.0	75-125
Chromium	1.5	201	200	99.8	75-125
Cobalt	0.020	478	500	95.6	75-125
Copper	0.48	236	250	94.2	75-125
Iron	77.6	705	1000	62.7N(a)	75-125
Lead	0.023	513	500	102.6	75-125
Magnesium	291000	319000	25000	112.0	75-125
Manganese	0.78	488	500	97.4	75-125
Molybdenum					
Nickel	1.3	474	500	94.5	75-125
Potassium	14700	42000	25000	109.2	75-125
Selenium	11.3	2050	2000	101.9	75-125
Silver	0.10	50.0	50	99.8	75-125
Sodium	2470000	2400000	25000	-280.0(b	75-125
Strontium					
Thallium	0.33	2080	2000	104.0	75-125
Tin					
Titanium					
Vanadium	8.3	514	500	101.1	75-125
Zinc	8.0	498	500	98.0	75-125

Associated samples MP79249: FA14479-1, FA14479-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike recovery indicates possible matrix interference.
(b) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

QC Batch ID: MP79249
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date: 05/01/14

Metal	FA14479-1 Original	MSD	Spikelot MPIRW1	% Rec	MSD RPD	QC Limit
Aluminum	10.3	2220	2000	110.5	3.2	20
Antimony	0.25	574	500	114.8	1.4	20
Arsenic	0.50	2090	2000	104.5	3.4	20
Barium	13.0	2140	2000	106.4	2.8	20
Beryllium	0.0	51.6	50	103.2	1.6	20
Boron						
Cadmium	0.0	49.3	50	98.6	2.0	20
Calcium	322000	369000	25000	188.0(a)	5.0	20
Chromium	1.5	203	200	100.8	1.0	20
Cobalt	0.020	490	500	98.0	2.5	20
Copper	0.48	242	250	96.6	2.5	20
Iron	77.6	707	1000	62.9N	0.3	20
Lead	0.023	520	500	104.0	1.4	20
Magnesium	291000	334000	25000	172.0(a)	4.6	20
Manganese	0.78	505	500	100.8	3.4	20
Molybdenum						
Nickel	1.3	480	500	95.7	1.3	20
Potassium	14700	42600	25000	111.6	1.4	20
Selenium	11.3	2070	2000	102.9	1.0	20
Silver	0.10	51.0	50	101.8	2.0	20
Sodium	2470000	2280000	25000	-760.0(a	5.1	20
Strontium						
Thallium	0.33	2100	2000	105.0	1.0	20
Tin						
Titanium						
Vanadium	8.3	528	500	103.9	2.7	20
Zinc	8.0	511	500	100.6	2.6	20

Associated samples MP79249: FA14479-1, FA14479-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

QC Batch ID: MP79249
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date: 05/01/14

Metal	LCS Result	Spikelot MPLCW3	% Rec	QC Limits
Aluminum	4980	5000	99.6	80-120
Antimony	512	500	102.4	80-120
Arsenic	498	500	99.6	80-120
Barium	477	500	95.4	80-120
Beryllium	476	500	95.2	80-120
Boron				
Cadmium	501	500	100.2	80-120
Calcium	5620	5500	102.2	80-120
Chromium	497	500	99.4	80-120
Cobalt	493	500	98.6	80-120
Copper	500	500	100.0	80-120
Iron	5570	5500	101.3	80-120
Lead	495	500	99.0	80-120
Magnesium	5510	5500	100.2	80-120
Manganese	492	500	98.4	80-120
Molybdenum				
Nickel	493	500	98.6	80-120
Potassium	10000	10000	100.0	80-120
Selenium	499	500	99.8	80-120
Silver	193	200	96.5	80-120
Sodium	9790	10000	97.9	80-120
Strontium				
Thallium	483	500	96.6	80-120
Tin				
Titanium				
Vanadium	500	500	100.0	80-120
Zinc	521	500	104.2	80-120

Associated samples MP79249: FA14479-1, FA14479-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

QC Batch ID: MP79249
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date: 05/01/14

Metal	FA14479-1 Original	SDL 2:10	%DIF	QC Limits
Aluminum	10.3	7.68	25.1*(a)	0-10
Antimony	0.254	0.00	100.0(b)	0-10
Arsenic	0.497	0.235	52.7 (b)	0-10
Barium	13.0	14.2	9.3	0-10
Beryllium	0.00	0.00	NC	0-10
Boron				
Cadmium	0.00	0.00	NC	0-10
Calcium	322000	323000	0.2	0-10
Chromium	1.54	1.84	19.6*(a)	0-10
Cobalt	0.0204	0.00	100.0(b)	0-10
Copper	0.475	0.158	66.7 (b)	0-10
Iron	77.6	66.1	14.8 (b)	0-10
Lead	0.0231	0.00	100.0(b)	0-10
Magnesium	291000	299000	2.8	0-10
Manganese	0.779	0.971	24.6 (b)	0-10
Molybdenum				
Nickel	1.34	1.46	8.7	0-10
Potassium	14700	15300	3.9	0-10
Selenium	11.3	12.9	14.5*(a)	0-10
Silver	0.103	0.102	1.4	0-10
Sodium	2470000	2470000	0.3	0-10
Strontium				
Thallium	0.332	0.00	100.0(b)	0-10
Tin				
Titanium				
Vanadium	8.32	7.44	10.5*(a)	0-10
Zinc	7.97	9.30	16.7 (b)	0-10

Associated samples MP79249: FA14479-1, FA14479-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Serial dilution indicates possible matrix interference. Results confirmed with analysis of second dilution.
(b) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

POST DIGESTATE SPIKE SUMMARY

Login Number: FA14479
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

QC Batch ID: MP79249
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date: 05/01/14

Metal	Sample ml	Final ml	FA14479-1 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum	9.6	10	10.26082	9.850386	4687.918	0.2	250	5000	93.6	75-125
Antimony	9.6	10	.2536456	.2434998	50.14038	0.2	2.5	50	99.8	75-125
Arsenic	9.6	10	.4970333	.477152	45.55748	0.2	2.5	50	90.2	75-125
Barium	9.6	10	12.99057	12.47095	60.4072	0.2	2.5	50	95.9	75-125
Beryllium	9.6	10			47.85455	0.2	2.5	50	95.7	75-125
Boron										
Cadmium	9.6	10			42.70191	0.2	2.5	50	85.4	75-125
Calcium	9.6	10	322057.5	309175.2	303622.1	0.2	250	5000	-111.1*a	75-125
Chromium	9.6	10	1.535885	1.47445	44.98489	0.2	2.5	50	87.0	75-125
Cobalt	9.6	10	.02036067	.0195462	42.65485	0.2	2.5	50	85.3	75-125
Copper	9.6	10	.4752595	.4562492	39.78573	0.2	2.5	50	78.7	75-125
Iron	9.6	10	77.56537	74.46275	4550.883	0.2	250	5000	89.5	75-125
Lead	9.6	10	.02305895	.0221365	948.3167	0.2	2.5	50	96.6	75-125
Magnesium	9.6	10	291377.8	279722.7	279168.4	0.2	250	5000	-11.1*(a	75-125
Manganese	9.6	10	.7792567	.7480865	44.00839	0.2	2.5	50	86.5	75-125
Molybdenum										
Nickel	9.6	10	1.343616	1.289871	39.42706	0.2	2.5	50	76.3	75-125
Potassium	9.6	10	14686.68	14099.22	18655.16	0.2	250	5000	91.1	75-125
Selenium	9.6	10	11.30393	10.85177	46.56538	0.2	2.5	50	71.4*(b)	75-125
Silver	9.6	10	.1033145	.0991818	44.57811	0.2	2.5	50	89.0	75-125
Sodium	9.6	10	2466996	2368317	2474660	0.2	250	5000	2126.9*c	75-125
Strontium										
Thallium	9.6	10	.3319776	.3186985	46.7849	0.2	2.5	50	92.9	75-125
Tin										
Titanium										
Vanadium	9.6	10	8.317929	7.985212	56.07319	0.2	2.5	50	96.2	75-125
Zinc	9.6	10	7.972301	7.653409	81.7313	0.2	5	100	74.1*(b)	75-125

Associated samples MP79249: FA14479-1, FA14479-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested
(a) Spike amount low relative to the sample result.
(b) Spike recovery indicates possible matrix interference.
(c) spike amount is relatively low to sample result

NELAP CERTIFICATE NUMBER 01955
DOD ELAP CERTIFICATE NUMBER L13-190

ANALYTICAL RESULTS

PERFORMED BY

GCAL, LLC
7979 Innovation Park Dr.
Baton Rouge, LA 70820

Report Date 05/20/2014

GCAL Report 214042416

Deliver To	Trinity A&D 1002 N Eglin Pkwy Shalimar, FL 32579 850-613-6800
Attn	Jonathan Kramer

Customer TRINITY Analysis & Development Corp.

Project Melrose

Case Narrative

Client: TRINITY Analysis & Development Corp. **Report:** 214042416

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the sample cross-reference page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

Additional Flags:

Q – non-compliant QC result (see Q Flag Application Form)

VOLATILES MASS SPECTROMETRY

In the EPA 8260B analysis, the recovery for the surrogate 1,2-Dichloroethane-d4 is above the upper control limit for sample 21404241608 (MA01MW004). No target analytes were detected in the sample.

In the EPA 8260B analysis, the recovery for Dichlorodifluoromethane is above the upper control limit in the ICV (MSV5, 05/04/14). This analyte was not detected in the associated samples.

In the EPA 8260B analysis for analytical batch 531663, the MS/MSD exhibited recovery failures. Affected analytes are flagged “J” on Form 1 for MS/MSD parent sample. The LCS/LCSD recoveries are acceptable. The %D/%Drift is outside ± 20% for Dichlorodifluoromethane in the CCV. This analyte was not detected in the associated samples.

In the EPA 8260B analysis for analytical batch 532018, the %D/%Drift is outside ± 20% for Acetone in the CCV. The response is high and this analyte was not detected in the associated samples.

HIGH PERFORMANCE LIQUID CHROMATOGRAPHY

In the EPA 8330A analysis for prep batch 531047, the MS/MSD exhibited recovery and RPD failures. Affected analytes are flagged “J” on Form 1 for MS/MSD parent sample. All LCS/LCSD recoveries are acceptable.

METALS

The dissolved concentration for some analytes is slightly greater than the total concentration of these analytes in several samples. This is attributed to separate aliquots of sample.

In the EPA 6020A analysis, samples 21404241601 (MA01MW002), 21404241602 (MA01MW002-ms), 21404241603 (MA01MW002-sd), 21404241605 (MA01MW003), 21404241606 (MA01MW001), 21404241608 (MA01MW004), 21404241609 (M114MW003), 21404241611 (M114MW002), 21404241612 (M114MW001), 21404241614 (M114MW004), 21404241615 (MWQ-24), 21404241617 (MA02MW001D) and 21404241618 (MA02MW001D-a) had to be diluted in order to bracket the concentration within the calibration range of the instrument and/or to eliminate a chemical or physical interference. This is reflected in the elevated detection limits.

In the EPA 6020A analysis for prep batches 530904, the MS/MSD recoveries are not applicable for Magnesium and Sodium because the sample concentration is greater than four times the spike concentration. Manganese was detected at a concentration above the PQL in the method blank (1308856). Manganese was not detected in the associated samples (except MS/MSD).

In the EPA 6020A analysis for prep batches 530980 and 531123, the MS/MSD recoveries are not applicable for Magnesium and Sodium because the sample concentration is greater than four times the spike concentration.

In the EPA 6020A Dissolved analysis for prep batch 530979, the MS/MSD recoveries are not applicable for Magnesium and Sodium because the sample concentration is greater than four times the spike concentration.Tthe MS and/or MSD recovery is outside the control limits for Silver. The LCS recovery is within the control limits. This indicates the analysis is in control and the sample is affected by matrix interference.

In the EPA 6020A analysis for prep batch 530905, the MS/MSD recoveries are not applicable for Magnesium and Sodium because the sample concentration is greater than four times the spike concentration. The MS and/or MSD recovery is outside the control limits for Silver and Titanium. In addition the MS/MSD RPD for Aluminum, Silver, and Titanium is above the upper control limit. The LCS recoveries are acceptable. This indicates the analysis is in control and the sample is affected by matrix interference.

In the EPA 7470A analysis for prep batches 530903, 530978,and 531125, the MS and/or MSD recovery is outside the control limits for Mercury. The LCS recovery is within the control limits. This indicates the analysis is in control and the sample is affected by matrix interference.

In the EPA 6020A analysis for analytical batch 531759, the recovery for Antimony is >120% in one CCV (ICPMS1, 05/06/14 at 11:28). This analyte was not detected in the associated samples.

CONVENTIONALS

In the EPA 300.0 analysis, samples 21404241605 (MAO1MW003), 21404241606 (MAO1MW001), 21404241601 (MAO1MW002), 21404241602 (MAO1MW002-MS), 21404241603 (MAO1MW002-MSD), 21404241608 (MA01MW004), 21404241609 (M114MW003), 21404241611 (M114MW002), 21404241612 (M114MW001), 21404241614 (M114MW004), 21404241615 (MWQ-24) and 21404241617 (MA02MW001D) had to be diluted in order to bracket the concentration of target analytes within the calibration range of the instrument.

In the EPA 353.2 analysis, samples 21404241614 (M114MW004), 21404241615 (MWQ-24), 21404241617 (MA02MW001D), 21404241618 (MA02MW001D-a) and 21404241608 (MA01MW004) had to be diluted in order to bracket the concentration within the calibration range of the instrument.

In the EPA 300.0 analysis for analytical batch 531116, the MS/MSD recovery isoutside the control limits for Sulfate. The LCS recovery was within control limits. This indicates the analysis is in control and the sample is affected by matrix interference.

In the EPA 300.0 analysis for analytical batch 531163, the MS/MSD recovery was outside the control limits for Sulfate. The LCS recovery was within control limits. This indicates the analysis is in control and the sample is affected by matrix interference.

In the EPA 9012B Cyanide analysis for prep batch 530925, the MS/MSD recoveries are outside control limits. The LCS recovery is acceptable. This indicates the analysis is in control and the

sample is affected by matrix interference.

MISCELLANEOUS

The volatile containers for sample 21404241618 (MA02MW001D-a) contained headspace in excess of that allowed by the method. The client authorized the laboratory to proceed with the analysis.

Method 2320B for alkalinity is intended for aqueous samples. Analysis on soil samples was requested by the client and falls outside of GCALs scope of accreditation.

Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

Common Abbreviations Utilized in this Report

ND	Indicates the result was Not Detected at the specified RDL
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
RDL	Reporting Detection Limit
00:00	Reported as a time equivalent to 12:00 AM

Reporting Flags Utilized in this Report

J	Indicates the result is between the MDL and RDL
U	Indicates the compound was analyzed for but not detected
B	Indicates the analyte was detected in the associated Method Blank

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with NELAC, this report shall be reproduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with the NELAC standard and terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Estimated uncertainty of measurement is available upon request. This report is in compliance with the DOD QSM as specified in the contract if applicable.

_____

Authorized Signature
GCAL REPORT 214042416

THIS REPORT CONTAINS _____ PAGES.

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241601	MA01MW002	Water	04/23/2014 10:06	04/24/2014 09:05
21404241602	MA01MW002-ms	Water	04/23/2014 10:06	04/24/2014 09:05
21404241603	MA01MW002-sd	Water	04/23/2014 10:06	04/24/2014 09:05
21404241604	TB-1	Water	04/23/2014 10:06	04/24/2014 09:05
21404241605	MA01MW003	Water	04/23/2014 13:08	04/24/2014 09:05
21404241606	MA01MW001	Water	04/23/2014 14:16	04/24/2014 09:05
21404241607	TB-2	Water	04/23/2014 14:16	04/24/2014 09:05
21404241608	MA01MW004	Water	04/24/2014 10:10	04/25/2014 09:15
21404241609	M114MW003	Water	04/24/2014 12:00	04/25/2014 09:15
21404241610	TB-3	Water	04/24/2014 10:10	04/25/2014 09:15
21404241611	M114MW002	Water	04/24/2014 13:08	04/25/2014 09:15
21404241612	M114MW001	Water	04/24/2014 14:30	04/25/2014 09:15
21404241613	TB-4	Water	04/24/2014 13:08	04/25/2014 09:15
21404241614	M114MW004	Water	04/25/2014 09:25	04/26/2014 09:45
21404241615	MWQ-24	Water	04/25/2014 11:00	04/26/2014 09:45
21404241616	TB-6	Water	04/25/2014 09:25	04/26/2014 09:45
21404241617	MA02MW001D	Water	04/25/2014 12:52	04/26/2014 09:45
21404241618	MA02MW001D-a	Water	04/25/2014 12:52	04/26/2014 09:45
21404241619	TB-7	Water	04/25/2014 12:52	04/26/2014 09:45

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241601	**MA01MW002**	Water	04/23/2014 10:06	04/24/2014 09:05

Subcontract Data

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/19/2014 08:56	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-000	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241601	**MA01MW002**	Water	04/23/2014 10:06	04/24/2014 09:05

Subcontract Data

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/19/2014 08:56	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-001	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241601	**MA01MW002**	Water	04/23/2014 10:06	04/24/2014 09:05

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/05/2014 00:48	JCK	531663

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	1.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	0.123U	1.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	1.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	1.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	1.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.200U	1.00	0.200	ug/L
563-58-6	1,1-Dichloropropene	0.052U	1.00	0.052	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.079U	1.00	0.079	ug/L
96-18-4	1,2,3-Trichloropropane	0.065U	1.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	1.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.084U	1.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	1.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	1.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	1.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	1.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	1.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.066U	1.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	1.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	0.059U	1.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	1.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	0.170U	1.00	0.170	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	0.080U	1.00	0.080	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	0.124U	1.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	0.070U	1.00	0.070	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	1.00	0.111	ug/L
108-86-1	Bromobenzene	0.145U	1.00	0.145	ug/L
74-97-5	Bromochloromethane	0.127U	1.00	0.127	ug/L
75-27-4	Bromodichloromethane	0.083U	1.00	0.083	ug/L
75-25-2	Bromoform	0.215U	1.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	1.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	1.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	1.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	1.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	1.00	0.235	ug/L
67-66-3	Chloroform	0.155U	1.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	1.00	0.144	ug/L
74-95-3	Dibromomethane	0.211U	1.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	1.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	1.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	0.265U	1.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	1.00	0.130	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
91-20-3	Naphthalene	0.176U	1.00	0.176	ug/L
100-42-5	Styrene	0.089U	1.00	0.089	ug/L
127-18-4	Tetrachloroethene	0.193U	1.00	0.193	ug/L
108-88-3	Toluene	0.122U	1.00	0.122	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241601	**MA01MW002**	Water	04/23/2014 10:06	04/24/2014 09:05

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/05/2014 00:48	JCK	531663

CAS#	Parameter	Result	RDL	MDL	Units
79-01-6	Trichloroethene	0.161U	1.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	1.00	0.157	ug/L
75-01-4	Vinyl chloride	0.127U	1.00	0.127	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	1.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	1.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	2.00	0.123	ug/L
104-51-8	n-Butylbenzene	0.123U	1.00	0.123	ug/L
103-65-1	n-Propylbenzene	0.727U	1.00	0.727	ug/L
95-47-6	o-Xylene	0.055U	1.00	0.055	ug/L
135-98-8	sec-Butylbenzene	0.107U	1.00	0.107	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L
98-06-6	tert-Butylbenzene	0.087U	1.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	0.077U	1.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	1.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	48.2	ug/L	96	75 - 120
1868-53-7	Dibromofluoromethane	50	49.5	ug/L	99	85 - 115
2037-26-5	Toluene d8	50	53.3	ug/L	107	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	51.4	ug/L	103	70 - 120

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241601	**MA01MW002**	Water	04/23/2014 10:06	04/24/2014 09:05

EPA 8330A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/28/2014 03:00	531047	EPA 8330A	1	04/28/2014 18:33	HCP	531158

CAS#	Parameter	Result	RDL	MDL	Units
99-35-4	1,3,5-Trinitrobenzene	0.150U	1.00	0.150	ug/L
99-65-0	1,3-Dinitrobenzene	0.150U	1.00	0.150	ug/L
118-96-7	2,4,6-Trinitrotoluene	0.270U	1.00	0.270	ug/L
121-14-2	2,4-Dinitrotoluene	0.290U	1.00	0.290	ug/L
606-20-2	2,6-Dinitrotoluene	0.260U	1.00	0.260	ug/L
355-72-78-2	2-Amino-4,6-dinitrotoluene	0.300U	1.00	0.300	ug/L
88-72-2	2-Nitrotoluene	0.170U	1.00	0.170	ug/L
99-08-1	3-Nitrotoluene	0.330U	1.00	0.330	ug/L
1946-51-0	4-Amino-2,6-dinitrotoluene	0.360U	1.00	0.360	ug/L
99-99-0	4-Nitrotoluene	0.420U	1.00	0.420	ug/L
2691-41-0	HMX	0.130U	1.00	0.130	ug/L
98-95-3	Nitrobenzene	0.230U	1.00	0.230	ug/L
55-63-0	Nitroglycerin	0.380U	1.00	0.380	ug/L
78-11-5	Pentaerythritol Tetranitrate	0.590U	1.00	0.590	ug/L
121-82-4	RDX	0.170U	1.00	0.170	ug/L
479-45-8	Tetryl	0.240U	1.00	0.240	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
528-29-0	1,2-Dinitrobenzene	2	1.39	ug/L	70	60 - 140

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241601	**MA01MW002**	Water	04/23/2014 10:06	04/24/2014 09:05

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/24/2014 15:50	530904	EPA 3010A	80	04/29/2014 18:11	BAM	531323

CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	**Sodium**	**532000**	**8000**	**2000**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241601	**MA01MW002**	Water	04/23/2014 10:06	04/24/2014 09:05

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/24/2014 15:50	530904	EPA 3010A	5	04/30/2014 07:49	BAM	531323

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	25.0U	100	25.0	ug/L
7440-36-0	Antimony	2.50U	10.0	2.50	ug/L
7440-38-2	Arsenic	1.25U	5.00	1.25	ug/L
7440-39-3	**Barium**	**16.7**	**5.00**	**1.25**	**ug/L**
7440-41-7	Beryllium	1.25U	5.00	1.25	ug/L
7440-43-9	Cadmium	1.25U	5.00	1.25	ug/L
7440-70-2	**Calcium**	**45000**	**2500**	**625**	**ug/L**
7440-47-3	**Chromium**	**1.64J**	**5.00**	**1.25**	**ug/L**
7440-48-4	Cobalt	1.25U	5.00	1.25	ug/L
7440-50-8	Copper	1.25U	5.00	1.25	ug/L
7439-89-6	Iron	125U	500	125	ug/L
7439-92-1	Lead	1.25U	5.00	1.25	ug/L
7439-95-4	**Magnesium**	**37800**	**500**	**125**	**ug/L**
7439-96-5	Manganese	6.25U	25.0	6.25	ug/L
7439-98-7	**Molybdenum**	**6.78**	**5.00**	**1.25**	**ug/L**
7440-02-0	Nickel	2.50U	10.0	2.50	ug/L
7440-09-7	**Potassium**	**6300**	**500**	**125**	**ug/L**
7782-49-2	**Selenium**	**6.29**	**5.00**	**1.25**	**ug/L**
7440-22-4	Silver	1.25U	5.00	1.25	ug/L
7440-28-0	Thallium	1.25U	5.00	1.25	ug/L
7440-32-6	Titanium	1.25U	5.00	1.25	ug/L
7440-62-2	**Vanadium**	**11.7**	**5.00**	**1.25**	**ug/L**
7440-66-6	**Zinc**	**33.7J**	**100**	**25.0**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241601	**MA01MW002**	Water	04/23/2014 10:06	04/24/2014 09:05

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/24/2014 15:50	530903	EPA 7470A Dissolved	1	04/25/2014 18:23	PJS	531017

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.070U	0.20	0.070	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241601	**MA01MW002**	Water	04/23/2014 10:06	04/24/2014 09:05

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/24/2014 15:50	530903	EPA 7470A	1	04/25/2014 18:11	PJS	531017

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.070U	0.20	0.070	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241601	**MA01MW002**	Water	04/23/2014 10:06	04/24/2014 09:05

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/25/2014 08:50	530905	EPA 3005A Dissolved	80	04/30/2014 00:26	BAM	531323

CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	**Sodium**	**514000**	**8000**	**2000**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241601	**MA01MW002**	Water	04/23/2014 10:06	04/24/2014 09:05

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/25/2014 08:50	530905	EPA 3005A Dissolved	5	04/30/2014 11:04	BAM	531323

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	**Aluminum**	**270**	**100**	**25.0**	**ug/L**
7440-36-0	Antimony	2.50U	10.0	2.50	ug/L
7440-38-2	Arsenic	1.25U	5.00	1.25	ug/L
7440-39-3	**Barium**	**15.9**	**5.00**	**1.25**	**ug/L**
7440-41-7	Beryllium	1.25U	5.00	1.25	ug/L
7440-43-9	Cadmium	1.25U	5.00	1.25	ug/L
7440-70-2	**Calcium**	**41900**	**2500**	**625**	**ug/L**
7440-47-3	**Chromium**	**3.19J**	**5.00**	**1.25**	**ug/L**
7440-48-4	Cobalt	1.25U	5.00	1.25	ug/L
7440-50-8	Copper	1.25U	5.00	1.25	ug/L
7439-89-6	Iron	125U	500	125	ug/L
7439-92-1	Lead	1.25U	5.00	1.25	ug/L
7439-95-4	**Magnesium**	**34600**	**500**	**125**	**ug/L**
7439-96-5	**Manganese**	**7.52J**	**25.0**	**6.25**	**ug/L**
7439-98-7	**Molybdenum**	**6.67**	**5.00**	**1.25**	**ug/L**
7440-02-0	Nickel	2.50U	10.0	2.50	ug/L
7440-09-7	**Potassium**	**5830**	**500**	**125**	**ug/L**
7782-49-2	**Selenium**	**5.77**	**5.00**	**1.25**	**ug/L**
7440-22-4	Silver	1.25U	5.00	1.25	ug/L
7440-28-0	Thallium	1.25U	5.00	1.25	ug/L
7440-32-6	**Titanium**	**6.02**	**5.00**	**1.25**	**ug/L**
7440-62-2	**Vanadium**	**10.5**	**5.00**	**1.25**	**ug/L**
7440-66-6	Zinc	25.0U	100	25.0	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241601	**MA01MW002**	Water	04/23/2014 10:06	04/24/2014 09:05

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/25/2014 13:01	JRM	530975

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	**Total Dissolved Solids(TDS)**	**1630**	**10.0**	**4.39**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241601	**MA01MW002**	Water	04/23/2014 10:06	04/24/2014 09:05

EPA 353.2 Rev. 2

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/24/2014 15:31	DMT	530882

CAS#	Parameter	Result	RDL	MDL	Units
14797-65-0	Nitrite	0.006U	0.010	0.006	mg/L-N

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241601	**MA01MW002**	Water	04/23/2014 10:06	04/24/2014 09:05

EPA 353.2 Rev. 2

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/24/2014 15:09	DMT	530883

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	**Nitrate**	**0.368**	**0.010**	**0.008**	**mg/L-N**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241601	**MA01MW002**	Water	04/23/2014 10:06	04/24/2014 09:05

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			500	04/28/2014 14:21	AEL	531116

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	**Chloride**	**439**	**100**	**25.0**	**mg/L**
14808-79-8	**Sulfate**	**527**	**100**	**25.0**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241601	**MA01MW002**	Water	04/23/2014 10:06	04/24/2014 09:05

SM 2320 B-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/26/2014 11:00	MDW	531016

CAS#	Parameter	Result	RDL	MDL	Units
000000-00-5	**Total Alkalinity**	**191**	**1.0**	**0.26**	**mg/L CaCO3**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241601	**MA01MW002**	Water	04/23/2014 10:06	04/24/2014 09:05

EPA 9012B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/26/2014 12:00	530925	Cyanide Prep	1	04/29/2014 16:45	AEL	531266

CAS#	Parameter	Result	RDL	MDL	Units
57-12-5	Cyanide	0.00050U	0.0050	0.00050	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241602	**MA01MW002-ms**	Water	04/23/2014 10:06	04/24/2014 09:05

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/19/2014 08:56	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-000	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241602	**MA01MW002-ms**	Water	04/23/2014 10:06	04/24/2014 09:05

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/19/2014 08:56	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-001	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241602	**MA01MW002-ms**	Water	04/23/2014 10:06	04/24/2014 09:05

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/05/2014 01:56	LBH	531663

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	49.7	1.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	49.2	1.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	53.2	1.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	50.0	1.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	51.7	1.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	55.5	1.00	0.200	ug/L
563-58-6	1,1-Dichloropropene	56.0	1.00	0.052	ug/L
87-61-6	1,2,3-Trichlorobenzene	58.3	1.00	0.079	ug/L
96-18-4	1,2,3-Trichloropropane	51.1	1.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	58.1	1.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	54.0	1.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	57.5	1.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	51.9	1.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	51.8	1.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	51.2	1.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	50.4	1.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	57.3	1.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	51.4	1.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	50.1	1.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	50.5	1.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	49.2	1.00	0.170	ug/L
78-93-3	2-Butanone	45.3	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	53.0	1.00	0.080	ug/L
591-78-6	2-Hexanone	50.0	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	55.0	1.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	54.4	1.00	0.070	ug/L
108-10-1	4-Methyl-2-pentanone	54.5	5.00	0.120	ug/L
67-64-1	Acetone	48.9	5.00	0.193	ug/L
71-43-2	Benzene	52.1	1.00	0.111	ug/L
108-86-1	Bromobenzene	51.3	1.00	0.145	ug/L
74-97-5	Bromochloromethane	51.2	1.00	0.127	ug/L
75-27-4	Bromodichloromethane	50.5	1.00	0.083	ug/L
75-25-2	Bromoform	54.1	1.00	0.215	ug/L
74-83-9	Bromomethane	64.6	1.00	0.427	ug/L
75-15-0	Carbon disulfide	55.1	1.00	0.190	ug/L
56-23-5	Carbon tetrachloride	50.2	1.00	0.248	ug/L
108-90-7	Chlorobenzene	49.1	1.00	0.083	ug/L
75-00-3	Chloroethane	55.4	1.00	0.235	ug/L
67-66-3	Chloroform	49.4	1.00	0.155	ug/L
74-87-3	Chloromethane	63.7	1.00	0.144	ug/L
74-95-3	Dibromomethane	50.8	1.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	62.2	1.00	0.145	ug/L
100-41-4	Ethylbenzene	51.4	1.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	56.7	1.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	54.6	1.00	0.130	ug/L
75-09-2	Methylene chloride	57.6	5.00	0.149	ug/L
91-20-3	Naphthalene	50.8	1.00	0.176	ug/L
100-42-5	Styrene	48.0	1.00	0.089	ug/L
127-18-4	Tetrachloroethene	50.9	1.00	0.193	ug/L
108-88-3	Toluene	52.2	1.00	0.122	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241602	**MA01MW002-ms**	Water	04/23/2014 10:06	04/24/2014 09:05

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/05/2014 01:56	LBH	531663

CAS#	Parameter	Result	RDL	MDL	Units
79-01-6	**Trichloroethene**	**51.0**	**1.00**	**0.161**	**ug/L**
75-69-4	**Trichlorofluoromethane**	**54.0**	**1.00**	**0.157**	**ug/L**
75-01-4	**Vinyl chloride**	**57.3**	**1.00**	**0.127**	**ug/L**
156-59-2	**cis-1,2-Dichloroethene**	**52.3**	**1.00**	**0.103**	**ug/L**
10061-01-5	**cis-1,3-Dichloropropene**	**51.8**	**1.00**	**0.124**	**ug/L**
136777-61-2	**m,p-Xylene**	**109**	**2.00**	**0.123**	**ug/L**
104-51-8	**n-Butylbenzene**	**57.7**	**1.00**	**0.123**	**ug/L**
103-65-1	**n-Propylbenzene**	**53.4**	**1.00**	**0.727**	**ug/L**
95-47-6	**o-Xylene**	**54.0**	**1.00**	**0.055**	**ug/L**
135-98-8	**sec-Butylbenzene**	**59.0**	**1.00**	**0.107**	**ug/L**
1634-04-4	**tert-Butyl methyl ether (MTBE)**	**51.4**	**5.00**	**0.078**	**ug/L**
98-06-6	**tert-Butylbenzene**	**56.1**	**1.00**	**0.087**	**ug/L**
156-60-5	**trans-1,2-Dichloroethene**	**53.7**	**1.00**	**0.077**	**ug/L**
10061-02-6	**trans-1,3-Dichloropropene**	**51.9**	**1.00**	**0.128**	**ug/L**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	49.8	ug/L	100	75 - 120
1868-53-7	Dibromofluoromethane	50	48.7	ug/L	97	85 - 115
2037-26-5	Toluene d8	50	48.3	ug/L	97	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	49.6	ug/L	99	70 - 120

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241602	**MA01MW002-ms**	Water	04/23/2014 10:06	04/24/2014 09:05

SW-846 8330A Water

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/28/2014 03:00	531047	EPA 8330A	1	04/28/2014 19:36	HCP	531158

CAS#	Parameter	Result	RDL	MDL	Units
99-35-4	**1,3,5-Trinitrobenzene**	**1.80**	**1.00**	**0.150**	**ug/L**
99-65-0	**1,3-Dinitrobenzene**	**1.92**	**1.00**	**0.150**	**ug/L**
118-96-7	**2,4,6-Trinitrotoluene**	**1.66**	**1.00**	**0.270**	**ug/L**
121-14-2	**2,4-Dinitrotoluene**	**1.29**	**1.00**	**0.290**	**ug/L**
606-20-2	**2,6-Dinitrotoluene**	**1.75**	**1.00**	**0.260**	**ug/L**
355-72-78-2	**2-Amino-4,6-dinitrotoluene**	**1.77**	**1.00**	**0.300**	**ug/L**
88-72-2	**2-Nitrotoluene**	**1.77**	**1.00**	**0.170**	**ug/L**
99-08-1	**3-Nitrotoluene**	**3.59**	**1.00**	**0.330**	**ug/L**
1946-51-0	**4-Amino-2,6-dinitrotoluene**	**1.57**	**1.00**	**0.360**	**ug/L**
99-99-0	**4-Nitrotoluene**	**2.10**	**1.00**	**0.420**	**ug/L**
2691-41-0	**HMX**	**1.71**	**1.00**	**0.130**	**ug/L**
98-95-3	**Nitrobenzene**	**1.97**	**1.00**	**0.230**	**ug/L**
55-63-0	**Nitroglycerin**	**1.44**	**1.00**	**0.380**	**ug/L**
78-11-5	**Pentaerythritol Tetranitrate**	**3.59**	**1.00**	**0.590**	**ug/L**
121-82-4	**RDX**	**1.85**	**1.00**	**0.170**	**ug/L**
479-45-8	**Tetryl**	**0.964J**	**1.00**	**0.240**	**ug/L**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
528-29-0	1,2-Dinitrobenzene	2	1.64	ug/L	82	60 - 140

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241602	**MA01MW002-ms**	Water	04/23/2014 10:06	04/24/2014 09:05

SW-846 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/24/2014 15:50	530904	EPA 3010A	80	04/29/2014 18:19	BAM	531323

CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	**Sodium**	**540000**	**8000**	**2000**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241602	**MA01MW002-ms**	Water	04/23/2014 10:06	04/24/2014 09:05

SW-846 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/24/2014 15:50	530904	EPA 3010A	5	04/30/2014 07:57	BAM	531323

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	992	100	25.0	ug/L
7440-36-0	Antimony	115	10.0	2.50	ug/L
7440-38-2	Arsenic	50.4	5.00	1.25	ug/L
7440-39-3	Barium	68.2	5.00	1.25	ug/L
7440-41-7	Beryllium	45.6	5.00	1.25	ug/L
7440-43-9	Cadmium	50.0	5.00	1.25	ug/L
7440-70-2	Calcium	69300	2500	625	ug/L
7440-47-3	Chromium	48.7	5.00	1.25	ug/L
7440-48-4	Cobalt	47.8	5.00	1.25	ug/L
7440-50-8	Copper	46.1	5.00	1.25	ug/L
7439-89-6	Iron	4520	500	125	ug/L
7439-92-1	Lead	46.0	5.00	1.25	ug/L
7439-95-4	Magnesium	42300	500	125	ug/L
7439-96-5	Manganese	48.3	25.0	6.25	ug/L
7439-98-7	Molybdenum	57.4	5.00	1.25	ug/L
7440-02-0	Nickel	93.8	10.0	2.50	ug/L
7440-09-7	Potassium	11600	500	125	ug/L
7782-49-2	Selenium	15.9	5.00	1.25	ug/L
7440-22-4	Silver	45.9	5.00	1.25	ug/L
7440-28-0	Thallium	42.6	5.00	1.25	ug/L
7440-32-6	Titanium	49.9	5.00	1.25	ug/L
7440-62-2	Vanadium	61.4	5.00	1.25	ug/L
7440-66-6	Zinc	966	100	25.0	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241602	**MA01MW002-ms**	Water	04/23/2014 10:06	04/24/2014 09:05

SW-846 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/24/2014 15:50	530903	EPA 7470A Dissolved	1	04/25/2014 18:25	PJS	531017

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	**Mercury**	**3.88**	**0.20**	**0.070**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241602	**MA01MW002-ms**	Water	04/23/2014 10:06	04/24/2014 09:05

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/24/2014 15:50	530903	EPA 7470A	1	04/25/2014 18:12	PJS	531017

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	**Mercury**	**3.94**	**0.20**	**0.070**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241602	**MA01MW002-ms**	Water	04/23/2014 10:06	04/24/2014 09:05

SW-846 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/25/2014 08:50	530905	EPA 3005A Dissolved	80	04/30/2014 00:34	BAM	531323

CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	**Sodium**	**506000**	**8000**	**2000**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241602	**MA01MW002-ms**	Water	04/23/2014 10:06	04/24/2014 09:05

SW-846 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/25/2014 08:50	530905	EPA 3005A Dissolved	5	04/30/2014 11:12	BAM	531323

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	1100	100	25.0	ug/L
7440-36-0	Antimony	108	10.0	2.50	ug/L
7440-38-2	Arsenic	47.5	5.00	1.25	ug/L
7440-39-3	Barium	63.5	5.00	1.25	ug/L
7440-41-7	Beryllium	42.9	5.00	1.25	ug/L
7440-43-9	Cadmium	47.3	5.00	1.25	ug/L
7440-70-2	Calcium	63700	2500	625	ug/L
7440-47-3	Chromium	47.3	5.00	1.25	ug/L
7440-48-4	Cobalt	44.9	5.00	1.25	ug/L
7440-50-8	Copper	43.4	5.00	1.25	ug/L
7439-89-6	Iron	4360	500	125	ug/L
7439-92-1	Lead	43.0	5.00	1.25	ug/L
7439-95-4	Magnesium	38600	500	125	ug/L
7439-96-5	Manganese	51.3	25.0	6.25	ug/L
7439-98-7	Molybdenum	53.2	5.00	1.25	ug/L
7440-02-0	Nickel	88.4	10.0	2.50	ug/L
7440-09-7	Potassium	10800	500	125	ug/L
7782-49-2	Selenium	15.6	5.00	1.25	ug/L
7440-22-4	Silver	28.0	5.00	1.25	ug/L
7440-28-0	Thallium	41.1	5.00	1.25	ug/L
7440-32-6	Titanium	45.3	5.00	1.25	ug/L
7440-62-2	Vanadium	57.3	5.00	1.25	ug/L
7440-66-6	Zinc	909	100	25.0	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241602	**MA01MW002-ms**	Water	04/23/2014 10:06	04/24/2014 09:05

EPA 353.2 Nitrite

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/24/2014 15:32	DMT	530882

CAS#	Parameter	Result	RDL	MDL	Units
14797-65-0	**Nitrite**	**0.510**	**0.010**	**0.006**	**mg/L-N**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241602	**MA01MW002-ms**	Water	04/23/2014 10:06	04/24/2014 09:05

EPA 353.2 Nitrate

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/24/2014 15:48	DMT	530883

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	**Nitrate**	**0.905**	**0.010**	**0.008**	**mg/L-N**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241602	**MA01MW002-ms**	Water	04/23/2014 10:06	04/24/2014 09:05

EPA 300.0 Inorganic Anions

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			500	04/28/2014 14:39	AEL	531116

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	**Chloride**	**1690**	**100**	**25.0**	**mg/L**
14808-79-8	**Sulfate**	**1710**	**100**	**25.0**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241602	**MA01MW002-ms**	Water	04/23/2014 10:06	04/24/2014 09:05

SW-846 9012B Cyanide Water

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/26/2014 12:00	530925	Cyanide Prep	1	04/29/2014 16:46	AEL	531266

CAS#	Parameter	Result	RDL	MDL	Units
57-12-5	**Cyanide**	**0.071**	**0.0050**	**0.00050**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241603	**MA01MW002-sd**	Water	04/23/2014 10:06	04/24/2014 09:05

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/19/2014 08:57	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-000	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241603	**MA01MW002-sd**	Water	04/23/2014 10:06	04/24/2014 09:05

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/19/2014 08:58	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-001	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241603	**MA01MW002-sd**	Water	04/23/2014 10:06	04/24/2014 09:05

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/05/2014 02:18	LBH	531663

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	48.6	1.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	47.7	1.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	52.1	1.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	48.3	1.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	49.6	1.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	54.0	1.00	0.200	ug/L
563-58-6	1,1-Dichloropropene	53.2	1.00	0.052	ug/L
87-61-6	1,2,3-Trichlorobenzene	55.9	1.00	0.079	ug/L
96-18-4	1,2,3-Trichloropropane	49.8	1.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	55.9	1.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	51.3	1.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	55.7	1.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	50.5	1.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	49.8	1.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	49.5	1.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	48.1	1.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	55.3	1.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	49.3	1.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	49.0	1.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	48.7	1.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	46.0	1.00	0.170	ug/L
78-93-3	2-Butanone	46.7	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	51.3	1.00	0.080	ug/L
591-78-6	2-Hexanone	48.9	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	52.3	1.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	51.9	1.00	0.070	ug/L
108-10-1	4-Methyl-2-pentanone	53.0	5.00	0.120	ug/L
67-64-1	Acetone	48.8	5.00	0.193	ug/L
71-43-2	Benzene	50.5	1.00	0.111	ug/L
108-86-1	Bromobenzene	49.3	1.00	0.145	ug/L
74-97-5	Bromochloromethane	49.5	1.00	0.127	ug/L
75-27-4	Bromodichloromethane	49.7	1.00	0.083	ug/L
75-25-2	Bromoform	52.5	1.00	0.215	ug/L
74-83-9	Bromomethane	64.1	1.00	0.427	ug/L
75-15-0	Carbon disulfide	52.0	1.00	0.190	ug/L
56-23-5	Carbon tetrachloride	48.0	1.00	0.248	ug/L
108-90-7	Chlorobenzene	46.8	1.00	0.083	ug/L
75-00-3	Chloroethane	51.9	1.00	0.235	ug/L
67-66-3	Chloroform	48.0	1.00	0.155	ug/L
74-87-3	Chloromethane	61.7	1.00	0.144	ug/L
74-95-3	Dibromomethane	49.2	1.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	59.1	1.00	0.145	ug/L
100-41-4	Ethylbenzene	49.3	1.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	53.2	1.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	52.0	1.00	0.130	ug/L
75-09-2	Methylene chloride	55.3	5.00	0.149	ug/L
91-20-3	Naphthalene	49.4	1.00	0.176	ug/L
100-42-5	Styrene	45.8	1.00	0.089	ug/L
127-18-4	Tetrachloroethene	48.2	1.00	0.193	ug/L
108-88-3	Toluene	49.9	1.00	0.122	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241603	**MA01MW002-sd**	Water	04/23/2014 10:06	04/24/2014 09:05

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/05/2014 02:18	LBH	531663

CAS#	Parameter	Result	RDL	MDL	Units
79-01-6	**Trichloroethene**	**48.6**	**1.00**	**0.161**	**ug/L**
75-69-4	**Trichlorofluoromethane**	**51.3**	**1.00**	**0.157**	**ug/L**
75-01-4	**Vinyl chloride**	**54.0**	**1.00**	**0.127**	**ug/L**
156-59-2	**cis-1,2-Dichloroethene**	**49.9**	**1.00**	**0.103**	**ug/L**
10061-01-5	**cis-1,3-Dichloropropene**	**50.1**	**1.00**	**0.124**	**ug/L**
136777-61-2	**m,p-Xylene**	**104**	**2.00**	**0.123**	**ug/L**
104-51-8	**n-Butylbenzene**	**55.1**	**1.00**	**0.123**	**ug/L**
103-65-1	**n-Propylbenzene**	**50.2**	**1.00**	**0.727**	**ug/L**
95-47-6	**o-Xylene**	**51.6**	**1.00**	**0.055**	**ug/L**
135-98-8	**sec-Butylbenzene**	**56.4**	**1.00**	**0.107**	**ug/L**
1634-04-4	**tert-Butyl methyl ether (MTBE)**	**49.8**	**5.00**	**0.078**	**ug/L**
98-06-6	**tert-Butylbenzene**	**53.8**	**1.00**	**0.087**	**ug/L**
156-60-5	**trans-1,2-Dichloroethene**	**51.3**	**1.00**	**0.077**	**ug/L**
10061-02-6	**trans-1,3-Dichloropropene**	**50.0**	**1.00**	**0.128**	**ug/L**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	49.6	ug/L	99	75 - 120
1868-53-7	Dibromofluoromethane	50	47.7	ug/L	95	85 - 115
2037-26-5	Toluene d8	50	48.1	ug/L	96	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	50.6	ug/L	101	70 - 120

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241603	**MA01MW002-sd**	Water	04/23/2014 10:06	04/24/2014 09:05

SW-846 8330A Water

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/28/2014 03:00	531047	EPA 8330A	1	04/28/2014 20:40	HCP	531158

CAS#	Parameter	Result	RDL	MDL	Units
99-35-4	**1,3,5-Trinitrobenzene**	**1.61**	**1.00**	**0.150**	**ug/L**
99-65-0	**1,3-Dinitrobenzene**	**1.92**	**1.00**	**0.150**	**ug/L**
118-96-7	**2,4,6-Trinitrotoluene**	**1.87**	**1.00**	**0.270**	**ug/L**
121-14-2	**2,4-Dinitrotoluene**	**1.68**	**1.00**	**0.290**	**ug/L**
606-20-2	**2,6-Dinitrotoluene**	**1.95**	**1.00**	**0.260**	**ug/L**
355-72-78-2	**2-Amino-4,6-dinitrotoluene**	**1.26**	**1.00**	**0.300**	**ug/L**
88-72-2	**2-Nitrotoluene**	**1.81**	**1.00**	**0.170**	**ug/L**
99-08-1	**3-Nitrotoluene**	**3.13**	**1.00**	**0.330**	**ug/L**
1946-51-0	**4-Amino-2,6-dinitrotoluene**	**1.15**	**1.00**	**0.360**	**ug/L**
99-99-0	**4-Nitrotoluene**	**1.72**	**1.00**	**0.420**	**ug/L**
2691-41-0	**HMX**	**1.65**	**1.00**	**0.130**	**ug/L**
98-95-3	**Nitrobenzene**	**1.53**	**1.00**	**0.230**	**ug/L**
55-63-0	**Nitroglycerin**	**1.21**	**1.00**	**0.380**	**ug/L**
78-11-5	**Pentaerythritol Tetranitrate**	**3.13**	**1.00**	**0.590**	**ug/L**
121-82-4	**RDX**	**1.60**	**1.00**	**0.170**	**ug/L**
479-45-8	**Tetryl**	**0.959J**	**1.00**	**0.240**	**ug/L**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
528-29-0	1,2-Dinitrobenzene	2	1.29	ug/L	65	60 - 140

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241603	**MA01MW002-sd**	Water	04/23/2014 10:06	04/24/2014 09:05

SW-846 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/24/2014 15:50	530904	EPA 3010A	80	04/29/2014 18:27	BAM	531323

CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	**Sodium**	**521000**	**8000**	**2000**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241603	**MA01MW002-sd**	Water	04/23/2014 10:06	04/24/2014 09:05

SW-846 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/24/2014 15:50	530904	EPA 3010A	5	04/30/2014 08:36	BAM	531323

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	952	100	25.0	ug/L
7440-36-0	Antimony	108	10.0	2.50	ug/L
7440-38-2	Arsenic	47.9	5.00	1.25	ug/L
7440-39-3	Barium	64.7	5.00	1.25	ug/L
7440-41-7	Beryllium	41.4	5.00	1.25	ug/L
7440-43-9	Cadmium	46.9	5.00	1.25	ug/L
7440-70-2	Calcium	67000	2500	625	ug/L
7440-47-3	Chromium	46.7	5.00	1.25	ug/L
7440-48-4	Cobalt	45.3	5.00	1.25	ug/L
7440-50-8	Copper	44.1	5.00	1.25	ug/L
7439-89-6	Iron	4360	500	125	ug/L
7439-92-1	Lead	44.2	5.00	1.25	ug/L
7439-95-4	Magnesium	41600	500	125	ug/L
7439-96-5	Manganese	46.1	25.0	6.25	ug/L
7439-98-7	Molybdenum	54.7	5.00	1.25	ug/L
7440-02-0	Nickel	89.1	10.0	2.50	ug/L
7440-09-7	Potassium	11200	500	125	ug/L
7782-49-2	Selenium	15.5	5.00	1.25	ug/L
7440-22-4	Silver	44.0	5.00	1.25	ug/L
7440-28-0	Thallium	41.9	5.00	1.25	ug/L
7440-32-6	Titanium	44.9	5.00	1.25	ug/L
7440-62-2	Vanadium	58.6	5.00	1.25	ug/L
7440-66-6	Zinc	916	100	25.0	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241603	**MA01MW002-sd**	Water	04/23/2014 10:06	04/24/2014 09:05

SW-846 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/24/2014 15:50	530903	EPA 7470A Dissolved	1	04/25/2014 18:27	PJS	531017

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	**Mercury**	**3.82**	**0.20**	**0.070**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241603	**MA01MW002-sd**	Water	04/23/2014 10:06	04/24/2014 09:05

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/24/2014 15:50	530903	EPA 7470A	1	04/25/2014 18:14	PJS	531017

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	**Mercury**	**3.82**	**0.20**	**0.070**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241603	**MA01MW002-sd**	Water	04/23/2014 10:06	04/24/2014 09:05

SW-846 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/25/2014 08:50	530905	EPA 3005A Dissolved	80	04/30/2014 00:49	BAM	531323

CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	**Sodium**	**516000**	**8000**	**2000**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241603	**MA01MW002-sd**	Water	04/23/2014 10:06	04/24/2014 09:05

SW-846 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/25/2014 08:50	530905	EPA 3005A Dissolved	5	04/30/2014 11:20	BAM	531323

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	1360	100	25.0	ug/L
7440-36-0	Antimony	110	10.0	2.50	ug/L
7440-38-2	Arsenic	47.1	5.00	1.25	ug/L
7440-39-3	Barium	65.3	5.00	1.25	ug/L
7440-41-7	Beryllium	43.4	5.00	1.25	ug/L
7440-43-9	Cadmium	46.7	5.00	1.25	ug/L
7440-70-2	Calcium	63000	2500	625	ug/L
7440-47-3	Chromium	47.1	5.00	1.25	ug/L
7440-48-4	Cobalt	43.9	5.00	1.25	ug/L
7440-50-8	Copper	42.8	5.00	1.25	ug/L
7439-89-6	Iron	4350	500	125	ug/L
7439-92-1	Lead	42.6	5.00	1.25	ug/L
7439-95-4	Magnesium	38700	500	125	ug/L
7439-96-5	Manganese	50.6	25.0	6.25	ug/L
7439-98-7	Molybdenum	53.0	5.00	1.25	ug/L
7440-02-0	Nickel	86.5	10.0	2.50	ug/L
7440-09-7	Potassium	10700	500	125	ug/L
7782-49-2	Selenium	15.2	5.00	1.25	ug/L
7440-22-4	Silver	41.7	5.00	1.25	ug/L
7440-28-0	Thallium	40.7	5.00	1.25	ug/L
7440-32-6	Titanium	57.4	5.00	1.25	ug/L
7440-62-2	Vanadium	56.4	5.00	1.25	ug/L
7440-66-6	Zinc	897	100	25.0	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241603	**MA01MW002-sd**	Water	04/23/2014 10:06	04/24/2014 09:05

EPA 353.2 Nitrite

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/24/2014 15:34	DMT	530882

CAS#	Parameter	Result	RDL	MDL	Units
14797-65-0	**Nitrite**	**0.518**	**0.010**	**0.006**	**mg/L-N**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241603	**MA01MW002-sd**	Water	04/23/2014 10:06	04/24/2014 09:05

EPA 353.2 Nitrate

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/24/2014 15:49	DMT	530883

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	**Nitrate**	**0.890**	**0.010**	**0.008**	**mg/L-N**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241603	**MA01MW002-sd**	Water	04/23/2014 10:06	04/24/2014 09:05

EPA 300.0 Inorganic Anions

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			500	04/28/2014 14:56	AEL	531116

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	**Chloride**	**1690**	**100**	**25.0**	**mg/L**
14808-79-8	**Sulfate**	**1710**	**100**	**25.0**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241603	**MA01MW002-sd**	Water	04/23/2014 10:06	04/24/2014 09:05

SW-846 9012B Cyanide Water

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/26/2014 12:00	530925	Cyanide Prep	1	04/29/2014 16:47	AEL	531266

CAS#	Parameter	Result	RDL	MDL	Units
57-12-5	**Cyanide**	**0.071**	**0.0050**	**0.00050**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241604	**TB-1**	Water	04/23/2014 10:06	04/24/2014 09:05

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/05/2014 03:26	LBH	531663

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	1.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	0.123U	1.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	1.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	1.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	1.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.200U	1.00	0.200	ug/L
563-58-6	1,1-Dichloropropene	0.052U	1.00	0.052	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.079U	1.00	0.079	ug/L
96-18-4	1,2,3-Trichloropropane	0.065U	1.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	1.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.084U	1.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	1.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	1.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	1.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	1.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	1.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.066U	1.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	1.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	0.059U	1.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	1.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	0.170U	1.00	0.170	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	0.080U	1.00	0.080	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	0.124U	1.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	0.070U	1.00	0.070	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	1.00	0.111	ug/L
108-86-1	Bromobenzene	0.145U	1.00	0.145	ug/L
74-97-5	Bromochloromethane	0.127U	1.00	0.127	ug/L
75-27-4	Bromodichloromethane	0.083U	1.00	0.083	ug/L
75-25-2	Bromoform	0.215U	1.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	1.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	1.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	1.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	1.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	1.00	0.235	ug/L
67-66-3	Chloroform	0.155U	1.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	1.00	0.144	ug/L
74-95-3	Dibromomethane	0.211U	1.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	1.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	1.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	0.265U	1.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	1.00	0.130	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
91-20-3	Naphthalene	0.176U	1.00	0.176	ug/L
100-42-5	Styrene	0.089U	1.00	0.089	ug/L
127-18-4	Tetrachloroethene	0.193U	1.00	0.193	ug/L
108-88-3	Toluene	0.122U	1.00	0.122	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241604	**TB-1**	Water	04/23/2014 10:06	04/24/2014 09:05

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/05/2014 03:26	LBH	531663

CAS#	Parameter	Result	RDL	MDL	Units
79-01-6	Trichloroethene	0.161U	1.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	1.00	0.157	ug/L
75-01-4	Vinyl chloride	0.127U	1.00	0.127	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	1.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	1.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	2.00	0.123	ug/L
104-51-8	n-Butylbenzene	0.123U	1.00	0.123	ug/L
103-65-1	n-Propylbenzene	0.727U	1.00	0.727	ug/L
95-47-6	o-Xylene	0.055U	1.00	0.055	ug/L
135-98-8	sec-Butylbenzene	0.107U	1.00	0.107	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L
98-06-6	tert-Butylbenzene	0.087U	1.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	0.077U	1.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	1.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	49.1	ug/L	98	75 - 120
1868-53-7	Dibromofluoromethane	50	50.2	ug/L	100	85 - 115
2037-26-5	Toluene d8	50	52.9	ug/L	106	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	51	ug/L	102	70 - 120

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241605	**MA01MW003**	Water	04/23/2014 13:08	04/24/2014 09:05

Subcontract Data

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/19/2014 08:58	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-000	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241605	**MA01MW003**	Water	04/23/2014 13:08	04/24/2014 09:05

Subcontract Data

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/19/2014 08:58	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-001	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241605	**MA01MW003**	Water	04/23/2014 13:08	04/24/2014 09:05

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/05/2014 11:25	LBH	531681

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	1.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	0.123U	1.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	1.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	1.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	1.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.200U	1.00	0.200	ug/L
563-58-6	1,1-Dichloropropene	0.052U	1.00	0.052	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.079U	1.00	0.079	ug/L
96-18-4	1,2,3-Trichloropropane	0.065U	1.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	1.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.084U	1.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	1.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	1.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	1.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	1.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	1.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.066U	1.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	1.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	0.059U	1.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	1.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	0.170U	1.00	0.170	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	0.080U	1.00	0.080	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	0.124U	1.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	0.070U	1.00	0.070	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	1.00	0.111	ug/L
108-86-1	Bromobenzene	0.145U	1.00	0.145	ug/L
74-97-5	Bromochloromethane	0.127U	1.00	0.127	ug/L
75-27-4	Bromodichloromethane	0.083U	1.00	0.083	ug/L
75-25-2	Bromoform	0.215U	1.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	1.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	1.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	1.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	1.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	1.00	0.235	ug/L
67-66-3	Chloroform	0.155U	1.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	1.00	0.144	ug/L
74-95-3	Dibromomethane	0.211U	1.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	1.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	1.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	0.265U	1.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	1.00	0.130	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
91-20-3	Naphthalene	0.176U	1.00	0.176	ug/L
100-42-5	Styrene	0.089U	1.00	0.089	ug/L
127-18-4	Tetrachloroethene	0.193U	1.00	0.193	ug/L
108-88-3	Toluene	0.122U	1.00	0.122	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241605	**MA01MW003**	Water	04/23/2014 13:08	04/24/2014 09:05

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/05/2014 11:25	LBH	531681

CAS#	Parameter	Result	RDL	MDL	Units
79-01-6	Trichloroethene	0.161U	1.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	1.00	0.157	ug/L
75-01-4	Vinyl chloride	0.127U	1.00	0.127	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	1.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	1.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	2.00	0.123	ug/L
104-51-8	n-Butylbenzene	0.123U	1.00	0.123	ug/L
103-65-1	n-Propylbenzene	0.727U	1.00	0.727	ug/L
95-47-6	o-Xylene	0.055U	1.00	0.055	ug/L
135-98-8	sec-Butylbenzene	0.107U	1.00	0.107	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L
98-06-6	tert-Butylbenzene	0.087U	1.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	0.077U	1.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	1.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	46.2	ug/L	92	75 - 120
1868-53-7	Dibromofluoromethane	50	48.3	ug/L	97	85 - 115
2037-26-5	Toluene d8	50	47.1	ug/L	94	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	49.1	ug/L	98	70 - 120

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241605	**MA01MW003**	Water	04/23/2014 13:08	04/24/2014 09:05

EPA 8330A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/28/2014 03:00	531047	EPA 8330A	1	04/28/2014 21:44	HCP	531158

CAS#	Parameter	Result	RDL	MDL	Units
99-35-4	1,3,5-Trinitrobenzene	0.150U	1.00	0.150	ug/L
99-65-0	1,3-Dinitrobenzene	0.150U	1.00	0.150	ug/L
118-96-7	2,4,6-Trinitrotoluene	0.270U	1.00	0.270	ug/L
121-14-2	2,4-Dinitrotoluene	0.290U	1.00	0.290	ug/L
606-20-2	2,6-Dinitrotoluene	0.260U	1.00	0.260	ug/L
355-72-78-2	2-Amino-4,6-dinitrotoluene	0.300U	1.00	0.300	ug/L
88-72-2	2-Nitrotoluene	0.170U	1.00	0.170	ug/L
99-08-1	3-Nitrotoluene	0.330U	1.00	0.330	ug/L
1946-51-0	4-Amino-2,6-dinitrotoluene	0.360U	1.00	0.360	ug/L
99-99-0	4-Nitrotoluene	0.420U	1.00	0.420	ug/L
2691-41-0	HMX	0.130U	1.00	0.130	ug/L
98-95-3	Nitrobenzene	0.230U	1.00	0.230	ug/L
55-63-0	Nitroglycerin	0.380U	1.00	0.380	ug/L
78-11-5	Pentaerythritol Tetranitrate	0.590U	1.00	0.590	ug/L
121-82-4	RDX	0.170U	1.00	0.170	ug/L
479-45-8	Tetryl	0.240U	1.00	0.240	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
528-29-0	1,2-Dinitrobenzene	2	1.49	ug/L	75	60 - 140

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241605	**MA01MW003**	Water	04/23/2014 13:08	04/24/2014 09:05

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/24/2014 15:50	530904	EPA 3010A	80	04/29/2014 19:22	BAM	531323

CAS#	Parameter	Result	RDL	MDL	Units
7439-95-4	**Magnesium**	**61600**	**8000**	**2000**	**ug/L**
7440-23-5	**Sodium**	**466000**	**8000**	**2000**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241605	**MA01MW003**	Water	04/23/2014 13:08	04/24/2014 09:05

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/24/2014 15:50	530904	EPA 3010A	5	04/30/2014 09:31	BAM	531323

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	25.0U	100	25.0	ug/L
7440-36-0	Antimony	2.50U	10.0	2.50	ug/L
7440-38-2	Arsenic	1.25U	5.00	1.25	ug/L
7440-39-3	**Barium**	**14.4**	**5.00**	**1.25**	**ug/L**
7440-41-7	Beryllium	1.25U	5.00	1.25	ug/L
7440-43-9	Cadmium	1.25U	5.00	1.25	ug/L
7440-70-2	**Calcium**	**66300**	**2500**	**625**	**ug/L**
7440-47-3	Chromium	1.25U	5.00	1.25	ug/L
7440-48-4	Cobalt	1.25U	5.00	1.25	ug/L
7440-50-8	Copper	1.25U	5.00	1.25	ug/L
7439-89-6	Iron	125U	500	125	ug/L
7439-92-1	Lead	1.25U	5.00	1.25	ug/L
7439-96-5	Manganese	6.25U	25.0	6.25	ug/L
7439-98-7	**Molybdenum**	**3.57J**	**5.00**	**1.25**	**ug/L**
7440-02-0	Nickel	2.50U	10.0	2.50	ug/L
7440-09-7	**Potassium**	**6970**	**500**	**125**	**ug/L**
7782-49-2	**Selenium**	**5.54**	**5.00**	**1.25**	**ug/L**
7440-22-4	Silver	1.25U	5.00	1.25	ug/L
7440-28-0	Thallium	1.25U	5.00	1.25	ug/L
7440-32-6	Titanium	1.25U	5.00	1.25	ug/L
7440-62-2	**Vanadium**	**12.0**	**5.00**	**1.25**	**ug/L**
7440-66-6	Zinc	25.0U	100	25.0	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241605	**MA01MW003**	Water	04/23/2014 13:08	04/24/2014 09:05

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/24/2014 15:50	530903	EPA 7470A Dissolved	1	04/25/2014 18:29	PJS	531017

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.070U	0.20	0.070	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241605	**MA01MW003**	Water	04/23/2014 13:08	04/24/2014 09:05

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/24/2014 15:50	530903	EPA 7470A	1	04/25/2014 18:20	PJS	531017

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.070U	0.20	0.070	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241605	**MA01MW003**	Water	04/23/2014 13:08	04/24/2014 09:05

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/25/2014 08:50	530905	EPA 3005A Dissolved	80	04/30/2014 01:05	BAM	531323

CAS#	Parameter	Result	RDL	MDL	Units
7439-95-4	**Magnesium**	**62200**	**8000**	**2000**	**ug/L**
7440-23-5	**Sodium**	**458000**	**8000**	**2000**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241605	**MA01MW003**	Water	04/23/2014 13:08	04/24/2014 09:05

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/25/2014 08:50	530905	EPA 3005A Dissolved	5	04/30/2014 11:36	BAM	531323

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	25.0U	100	25.0	ug/L
7440-36-0	Antimony	2.50U	10.0	2.50	ug/L
7440-38-2	Arsenic	1.25U	5.00	1.25	ug/L
7440-39-3	**Barium**	**15.1**	**5.00**	**1.25**	**ug/L**
7440-41-7	Beryllium	1.25U	5.00	1.25	ug/L
7440-43-9	Cadmium	1.25U	5.00	1.25	ug/L
7440-70-2	**Calcium**	**66700**	**2500**	**625**	**ug/L**
7440-47-3	Chromium	1.25U	5.00	1.25	ug/L
7440-48-4	Cobalt	1.25U	5.00	1.25	ug/L
7440-50-8	Copper	1.25U	5.00	1.25	ug/L
7439-89-6	Iron	125U	500	125	ug/L
7439-92-1	Lead	1.25U	5.00	1.25	ug/L
7439-96-5	Manganese	6.25U	25.0	6.25	ug/L
7439-98-7	**Molybdenum**	**3.55J**	**5.00**	**1.25**	**ug/L**
7440-02-0	Nickel	2.50U	10.0	2.50	ug/L
7440-09-7	**Potassium**	**7110**	**500**	**125**	**ug/L**
7782-49-2	**Selenium**	**5.74**	**5.00**	**1.25**	**ug/L**
7440-22-4	Silver	1.25U	5.00	1.25	ug/L
7440-28-0	Thallium	1.25U	5.00	1.25	ug/L
7440-32-6	Titanium	1.25U	5.00	1.25	ug/L
7440-62-2	**Vanadium**	**12.2**	**5.00**	**1.25**	**ug/L**
7440-66-6	Zinc	25.0U	100	25.0	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241605	**MA01MW003**	Water	04/23/2014 13:08	04/24/2014 09:05

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/25/2014 13:01	JRM	530975

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	**Total Dissolved Solids(TDS)**	**1660**	**10.0**	**4.39**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241605	**MA01MW003**	Water	04/23/2014 13:08	04/24/2014 09:05

EPA 353.2 Rev. 2

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/24/2014 15:35	DMT	530882

CAS#	Parameter	Result	RDL	MDL	Units
14797-65-0	Nitrite	0.006U	0.010	0.006	mg/L-N

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241605	**MA01MW003**	Water	04/23/2014 13:08	04/24/2014 09:05

EPA 353.2 Rev. 2

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/24/2014 15:12	DMT	530883

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	**Nitrate**	**0.150**	**0.010**	**0.008**	**mg/L-N**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241605	**MA01MW003**	Water	04/23/2014 13:08	04/24/2014 09:05

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			500	04/28/2014 13:46	AEL	531116

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	**Chloride**	**529**	**100**	**25.0**	**mg/L**
14808-79-8	**Sulfate**	**591**	**100**	**25.0**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241605	**MA01MW003**	Water	04/23/2014 13:08	04/24/2014 09:05

SM 2320 B-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/26/2014 11:00	MDW	531016

CAS#	Parameter	Result	RDL	MDL	Units
000000-00-5	**Total Alkalinity**	**159**	**1.0**	**0.26**	**mg/L CaCO3**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241605	**MA01MW003**	Water	04/23/2014 13:08	04/24/2014 09:05

EPA 9012B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/26/2014 12:00	530925	Cyanide Prep	1	04/29/2014 16:48	AEL	531266

CAS#	Parameter	Result	RDL	MDL	Units
57-12-5	**Cyanide**	**0.0033J**	**0.0050**	**0.00050**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241606	**MA01MW001**	Water	04/23/2014 14:16	04/24/2014 09:05

Subcontract Data

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/19/2014 08:58	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-000	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241606	**MA01MW001**	Water	04/23/2014 14:16	04/24/2014 09:05

Subcontract Data

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/19/2014 08:58	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-001	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241606	**MA01MW001**	Water	04/23/2014 14:16	04/24/2014 09:05

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/05/2014 11:48	LBH	531681

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	1.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	0.123U	1.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	1.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	1.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	1.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.200U	1.00	0.200	ug/L
563-58-6	1,1-Dichloropropene	0.052U	1.00	0.052	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.079U	1.00	0.079	ug/L
96-18-4	1,2,3-Trichloropropane	0.065U	1.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	1.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.084U	1.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	1.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	1.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	1.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	1.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	1.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.066U	1.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	1.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	0.059U	1.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	1.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	0.170U	1.00	0.170	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	0.080U	1.00	0.080	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	0.124U	1.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	0.070U	1.00	0.070	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	**Acetone**	**1.38J**	**5.00**	**0.193**	**ug/L**
71-43-2	Benzene	0.111U	1.00	0.111	ug/L
108-86-1	Bromobenzene	0.145U	1.00	0.145	ug/L
74-97-5	Bromochloromethane	0.127U	1.00	0.127	ug/L
75-27-4	Bromodichloromethane	0.083U	1.00	0.083	ug/L
75-25-2	Bromoform	0.215U	1.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	1.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	1.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	1.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	1.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	1.00	0.235	ug/L
67-66-3	Chloroform	0.155U	1.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	1.00	0.144	ug/L
74-95-3	Dibromomethane	0.211U	1.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	1.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	1.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	0.265U	1.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	1.00	0.130	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
91-20-3	Naphthalene	0.176U	1.00	0.176	ug/L
100-42-5	Styrene	0.089U	1.00	0.089	ug/L
127-18-4	Tetrachloroethene	0.193U	1.00	0.193	ug/L
108-88-3	Toluene	0.122U	1.00	0.122	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241606	**MA01MW001**	Water	04/23/2014 14:16	04/24/2014 09:05

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/05/2014 11:48	LBH	531681

CAS#	Parameter	Result	RDL	MDL	Units
79-01-6	Trichloroethene	0.161U	1.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	1.00	0.157	ug/L
75-01-4	Vinyl chloride	0.127U	1.00	0.127	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	1.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	1.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	2.00	0.123	ug/L
104-51-8	n-Butylbenzene	0.123U	1.00	0.123	ug/L
103-65-1	n-Propylbenzene	0.727U	1.00	0.727	ug/L
95-47-6	o-Xylene	0.055U	1.00	0.055	ug/L
135-98-8	sec-Butylbenzene	0.107U	1.00	0.107	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L
98-06-6	tert-Butylbenzene	0.087U	1.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	0.077U	1.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	1.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	49.8	ug/L	100	75 - 120
1868-53-7	Dibromofluoromethane	50	47.4	ug/L	95	85 - 115
2037-26-5	Toluene d8	50	49.6	ug/L	99	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	48.1	ug/L	96	70 - 120

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241606	**MA01MW001**	Water	04/23/2014 14:16	04/24/2014 09:05

EPA 8330A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/28/2014 03:00	531047	EPA 8330A	1	04/28/2014 22:48	HCP	531158

CAS#	Parameter	Result	RDL	MDL	Units
99-35-4	1,3,5-Trinitrobenzene	0.150U	1.00	0.150	ug/L
99-65-0	1,3-Dinitrobenzene	0.150U	1.00	0.150	ug/L
118-96-7	2,4,6-Trinitrotoluene	0.270U	1.00	0.270	ug/L
121-14-2	2,4-Dinitrotoluene	0.290U	1.00	0.290	ug/L
606-20-2	2,6-Dinitrotoluene	0.260U	1.00	0.260	ug/L
355-72-78-2	2-Amino-4,6-dinitrotoluene	0.300U	1.00	0.300	ug/L
88-72-2	2-Nitrotoluene	0.170U	1.00	0.170	ug/L
99-08-1	3-Nitrotoluene	0.330U	1.00	0.330	ug/L
1946-51-0	4-Amino-2,6-dinitrotoluene	0.360U	1.00	0.360	ug/L
99-99-0	4-Nitrotoluene	0.420U	1.00	0.420	ug/L
2691-41-0	HMX	0.130U	1.00	0.130	ug/L
98-95-3	Nitrobenzene	0.230U	1.00	0.230	ug/L
55-63-0	Nitroglycerin	0.380U	1.00	0.380	ug/L
78-11-5	Pentaerythritol Tetranitrate	0.590U	1.00	0.590	ug/L
121-82-4	RDX	0.170U	1.00	0.170	ug/L
479-45-8	Tetryl	0.240U	1.00	0.240	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
528-29-0	1,2-Dinitrobenzene	2	1.63	ug/L	82	60 - 140

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241606	**MA01MW001**	Water	04/23/2014 14:16	04/24/2014 09:05

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/24/2014 15:50	530904	EPA 3010A	80	04/29/2014 19:30	BAM	531323

CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	**Sodium**	**609000**	**8000**	**2000**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241606	**MA01MW001**	Water	04/23/2014 14:16	04/24/2014 09:05

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/24/2014 15:50	530904	EPA 3010A	5	04/30/2014 09:38	BAM	531323

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	25.0U	100	25.0	ug/L
7440-36-0	Antimony	2.50U	10.0	2.50	ug/L
7440-38-2	Arsenic	1.25U	5.00	1.25	ug/L
7440-39-3	**Barium**	**14.5**	**5.00**	**1.25**	**ug/L**
7440-41-7	Beryllium	1.25U	5.00	1.25	ug/L
7440-43-9	Cadmium	1.25U	5.00	1.25	ug/L
7440-70-2	**Calcium**	**52700**	**2500**	**625**	**ug/L**
7440-47-3	Chromium	1.25U	5.00	1.25	ug/L
7440-48-4	Cobalt	1.25U	5.00	1.25	ug/L
7440-50-8	Copper	1.25U	5.00	1.25	ug/L
7439-89-6	Iron	125U	500	125	ug/L
7439-92-1	Lead	1.25U	5.00	1.25	ug/L
7439-95-4	**Magnesium**	**45100**	**500**	**125**	**ug/L**
7439-96-5	Manganese	6.25U	25.0	6.25	ug/L
7439-98-7	**Molybdenum**	**5.28**	**5.00**	**1.25**	**ug/L**
7440-02-0	Nickel	2.50U	10.0	2.50	ug/L
7440-09-7	**Potassium**	**6170**	**500**	**125**	**ug/L**
7782-49-2	**Selenium**	**5.20**	**5.00**	**1.25**	**ug/L**
7440-22-4	Silver	1.25U	5.00	1.25	ug/L
7440-28-0	Thallium	1.25U	5.00	1.25	ug/L
7440-32-6	Titanium	1.25U	5.00	1.25	ug/L
7440-62-2	**Vanadium**	**10.2**	**5.00**	**1.25**	**ug/L**
7440-66-6	Zinc	25.0U	100	25.0	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241606	**MA01MW001**	Water	04/23/2014 14:16	04/24/2014 09:05

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/24/2014 15:50	530903	EPA 7470A Dissolved	1	04/25/2014 18:30	PJS	531017

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.070U	0.20	0.070	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241606	**MA01MW001**	Water	04/23/2014 14:16	04/24/2014 09:05

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/24/2014 15:50	530903	EPA 7470A	1	04/25/2014 18:21	PJS	531017

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.070U	0.20	0.070	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241606	**MA01MW001**	Water	04/23/2014 14:16	04/24/2014 09:05

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/25/2014 08:50	530905	EPA 3005A Dissolved	80	04/30/2014 01:13	BAM	531323

CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	**Sodium**	**587000**	**8000**	**2000**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241606	**MA01MW001**	Water	04/23/2014 14:16	04/24/2014 09:05

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/25/2014 08:50	530905	EPA 3005A Dissolved	5	04/30/2014 11:43	BAM	531323

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	25.0U	100	25.0	ug/L
7440-36-0	Antimony	2.50U	10.0	2.50	ug/L
7440-38-2	Arsenic	1.25U	5.00	1.25	ug/L
7440-39-3	**Barium**	**13.5**	**5.00**	**1.25**	**ug/L**
7440-41-7	Beryllium	1.25U	5.00	1.25	ug/L
7440-43-9	Cadmium	1.25U	5.00	1.25	ug/L
7440-70-2	**Calcium**	**50400**	**2500**	**625**	**ug/L**
7440-47-3	Chromium	1.25U	5.00	1.25	ug/L
7440-48-4	Cobalt	1.25U	5.00	1.25	ug/L
7440-50-8	**Copper**	**1.35J**	**5.00**	**1.25**	**ug/L**
7439-89-6	Iron	125U	500	125	ug/L
7439-92-1	Lead	1.25U	5.00	1.25	ug/L
7439-95-4	**Magnesium**	**43100**	**500**	**125**	**ug/L**
7439-96-5	Manganese	6.25U	25.0	6.25	ug/L
7439-98-7	**Molybdenum**	**5.31**	**5.00**	**1.25**	**ug/L**
7440-02-0	Nickel	2.50U	10.0	2.50	ug/L
7440-09-7	**Potassium**	**6060**	**500**	**125**	**ug/L**
7782-49-2	**Selenium**	**5.70**	**5.00**	**1.25**	**ug/L**
7440-22-4	Silver	1.25U	5.00	1.25	ug/L
7440-28-0	Thallium	1.25U	5.00	1.25	ug/L
7440-32-6	Titanium	1.25U	5.00	1.25	ug/L
7440-62-2	**Vanadium**	**10.0**	**5.00**	**1.25**	**ug/L**
7440-66-6	Zinc	25.0U	100	25.0	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241606	**MA01MW001**	Water	04/23/2014 14:16	04/24/2014 09:05

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/25/2014 13:01	JRM	530975

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	**Total Dissolved Solids(TDS)**	**1900**	**10.0**	**4.39**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241606	**MA01MW001**	Water	04/23/2014 14:16	04/24/2014 09:05

EPA 353.2 Rev. 2

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/24/2014 15:36	DMT	530882

CAS#	Parameter	Result	RDL	MDL	Units
14797-65-0	Nitrite	0.006U	0.010	0.006	mg/L-N

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241606	**MA01MW001**	Water	04/23/2014 14:16	04/24/2014 09:05

EPA 353.2 Rev. 2

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/24/2014 15:46	DMT	530883

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	**Nitrate**	**0.209**	**0.010**	**0.008**	**mg/L-N**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241606	**MA01MW001**	Water	04/23/2014 14:16	04/24/2014 09:05

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			500	04/28/2014 14:03	AEL	531116

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	**Chloride**	**563**	**100**	**25.0**	**mg/L**
14808-79-8	**Sulfate**	**678**	**100**	**25.0**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241606	**MA01MW001**	Water	04/23/2014 14:16	04/24/2014 09:05

SM 2320 B-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/26/2014 11:00	MDW	531016

CAS#	Parameter	Result	RDL	MDL	Units
000000-00-5	**Total Alkalinity**	**169**	**1.0**	**0.26**	**mg/L CaCO3**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241606	**MA01MW001**	Water	04/23/2014 14:16	04/24/2014 09:05

EPA 9012B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/26/2014 12:00	530925	Cyanide Prep	1	04/29/2014 16:49	AEL	531266

CAS#	Parameter	Result	RDL	MDL	Units
57-12-5	**Cyanide**	**0.0011J**	**0.0050**	**0.00050**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241607	**TB-2**	Water	04/23/2014 14:16	04/24/2014 09:05

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/05/2014 12:11	LBH	531681

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	1.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	0.123U	1.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	1.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	1.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	1.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.200U	1.00	0.200	ug/L
563-58-6	1,1-Dichloropropene	0.052U	1.00	0.052	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.079U	1.00	0.079	ug/L
96-18-4	1,2,3-Trichloropropane	0.065U	1.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	1.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.084U	1.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	1.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	1.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	1.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	1.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	1.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.066U	1.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	1.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	0.059U	1.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	1.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	0.170U	1.00	0.170	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	0.080U	1.00	0.080	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	0.124U	1.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	0.070U	1.00	0.070	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	1.00	0.111	ug/L
108-86-1	Bromobenzene	0.145U	1.00	0.145	ug/L
74-97-5	Bromochloromethane	0.127U	1.00	0.127	ug/L
75-27-4	Bromodichloromethane	0.083U	1.00	0.083	ug/L
75-25-2	Bromoform	0.215U	1.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	1.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	1.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	1.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	1.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	1.00	0.235	ug/L
67-66-3	Chloroform	0.155U	1.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	1.00	0.144	ug/L
74-95-3	Dibromomethane	0.211U	1.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	1.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	1.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	0.265U	1.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	1.00	0.130	ug/L
75-09-2	**Methylene chloride**	**1.20J**	**5.00**	**0.149**	**ug/L**
91-20-3	Naphthalene	0.176U	1.00	0.176	ug/L
100-42-5	Styrene	0.089U	1.00	0.089	ug/L
127-18-4	Tetrachloroethene	0.193U	1.00	0.193	ug/L
108-88-3	Toluene	0.122U	1.00	0.122	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241607	**TB-2**	Water	04/23/2014 14:16	04/24/2014 09:05

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/05/2014 12:11	LBH	531681

CAS#	Parameter	Result	RDL	MDL	Units
79-01-6	Trichloroethene	0.161U	1.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	1.00	0.157	ug/L
75-01-4	Vinyl chloride	0.127U	1.00	0.127	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	1.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	1.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	2.00	0.123	ug/L
104-51-8	n-Butylbenzene	0.123U	1.00	0.123	ug/L
103-65-1	n-Propylbenzene	0.727U	1.00	0.727	ug/L
95-47-6	o-Xylene	0.055U	1.00	0.055	ug/L
135-98-8	sec-Butylbenzene	0.107U	1.00	0.107	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L
98-06-6	tert-Butylbenzene	0.087U	1.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	0.077U	1.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	1.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	48.8	ug/L	98	75 - 120
1868-53-7	Dibromofluoromethane	50	49.4	ug/L	99	85 - 115
2037-26-5	Toluene d8	50	50.2	ug/L	100	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	50.2	ug/L	100	70 - 120

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241608	**MA01MW004**	Water	04/24/2014 10:10	04/25/2014 09:15

Subcontract Data

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/19/2014 08:59	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-000	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241608	**MA01MW004**	Water	04/24/2014 10:10	04/25/2014 09:15

Subcontract Data

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/19/2014 08:59	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-001	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241608	**MA01MW004**	Water	04/24/2014 10:10	04/25/2014 09:15

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/05/2014 19:19	CLH	531681

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	1.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	0.123U	1.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	1.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	1.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	1.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.200U	1.00	0.200	ug/L
563-58-6	1,1-Dichloropropene	0.052U	1.00	0.052	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.079U	1.00	0.079	ug/L
96-18-4	1,2,3-Trichloropropane	0.065U	1.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	1.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.084U	1.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	1.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	1.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	1.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	1.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	1.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.066U	1.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	1.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	0.059U	1.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	1.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	0.170U	1.00	0.170	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	0.080U	1.00	0.080	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	0.124U	1.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	0.070U	1.00	0.070	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	1.00	0.111	ug/L
108-86-1	Bromobenzene	0.145U	1.00	0.145	ug/L
74-97-5	Bromochloromethane	0.127U	1.00	0.127	ug/L
75-27-4	Bromodichloromethane	0.083U	1.00	0.083	ug/L
75-25-2	Bromoform	0.215U	1.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	1.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	1.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	1.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	1.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	1.00	0.235	ug/L
67-66-3	Chloroform	0.155U	1.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	1.00	0.144	ug/L
74-95-3	Dibromomethane	0.211U	1.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	1.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	1.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	0.265U	1.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	1.00	0.130	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
91-20-3	Naphthalene	0.176U	1.00	0.176	ug/L
100-42-5	Styrene	0.089U	1.00	0.089	ug/L
127-18-4	Tetrachloroethene	0.193U	1.00	0.193	ug/L
108-88-3	Toluene	0.122U	1.00	0.122	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241608	**MA01MW004**	Water	04/24/2014 10:10	04/25/2014 09:15

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/05/2014 19:19	CLH	531681

CAS#	Parameter	Result	RDL	MDL	Units
79-01-6	Trichloroethene	0.161U	1.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	1.00	0.157	ug/L
75-01-4	Vinyl chloride	0.127U	1.00	0.127	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	1.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	1.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	2.00	0.123	ug/L
104-51-8	n-Butylbenzene	0.123U	1.00	0.123	ug/L
103-65-1	n-Propylbenzene	0.727U	1.00	0.727	ug/L
95-47-6	o-Xylene	0.055U	1.00	0.055	ug/L
135-98-8	sec-Butylbenzene	0.107U	1.00	0.107	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L
98-06-6	tert-Butylbenzene	0.087U	1.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	0.077U	1.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	1.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	46	ug/L	92	75 - 120
1868-53-7	Dibromofluoromethane	50	52.1	ug/L	104	85 - 115
2037-26-5	Toluene d8	50	47.5	ug/L	95	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	60.5	ug/L	**121***	70 - 120

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241608	**MA01MW004**	Water	04/24/2014 10:10	04/25/2014 09:15

EPA 8330A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/28/2014 03:00	531047	EPA 8330A	1	04/28/2014 23:52	HCP	531158

CAS#	Parameter	Result	RDL	MDL	Units
99-35-4	1,3,5-Trinitrobenzene	0.150U	1.00	0.150	ug/L
99-65-0	1,3-Dinitrobenzene	0.150U	1.00	0.150	ug/L
118-96-7	2,4,6-Trinitrotoluene	0.270U	1.00	0.270	ug/L
121-14-2	2,4-Dinitrotoluene	0.290U	1.00	0.290	ug/L
606-20-2	2,6-Dinitrotoluene	0.260U	1.00	0.260	ug/L
355-72-78-2	2-Amino-4,6-dinitrotoluene	0.300U	1.00	0.300	ug/L
88-72-2	2-Nitrotoluene	0.170U	1.00	0.170	ug/L
99-08-1	3-Nitrotoluene	0.330U	1.00	0.330	ug/L
1946-51-0	4-Amino-2,6-dinitrotoluene	0.360U	1.00	0.360	ug/L
99-99-0	4-Nitrotoluene	0.420U	1.00	0.420	ug/L
2691-41-0	HMX	0.130U	1.00	0.130	ug/L
98-95-3	Nitrobenzene	0.230U	1.00	0.230	ug/L
55-63-0	Nitroglycerin	0.380U	1.00	0.380	ug/L
78-11-5	Pentaerythritol Tetranitrate	0.590U	1.00	0.590	ug/L
121-82-4	RDX	0.170U	1.00	0.170	ug/L
479-45-8	Tetryl	0.240U	1.00	0.240	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
528-29-0	1,2-Dinitrobenzene	2	1.6	ug/L	80	60 - 140

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241608	**MA01MW004**	Water	04/24/2014 10:10	04/25/2014 09:15

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/25/2014 15:35	530980	EPA 3010A	50	04/29/2014 19:46	BAM	531323

CAS#	Parameter	Result	RDL	MDL	Units
7439-95-4	**Magnesium**	**37200**	**5000**	**1250**	**ug/L**
7440-23-5	**Sodium**	**322000**	**5000**	**1250**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241608	**MA01MW004**	Water	04/24/2014 10:10	04/25/2014 09:15

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/25/2014 15:35	530980	EPA 3010A	2	04/30/2014 11:51	BAM	531323

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	10.0U	40.0	10.0	ug/L
7440-36-0	Antimony	1.00U	4.00	1.00	ug/L
7440-38-2	**Arsenic**	**1.21J**	**2.00**	**0.50**	**ug/L**
7440-39-3	**Barium**	**21.8**	**2.00**	**0.50**	**ug/L**
7440-41-7	Beryllium	0.50U	2.00	0.50	ug/L
7440-43-9	Cadmium	0.50U	2.00	0.50	ug/L
7440-70-2	**Calcium**	**42200**	**1000**	**250**	**ug/L**
7440-47-3	**Chromium**	**0.58J**	**2.00**	**0.50**	**ug/L**
7440-48-4	Cobalt	0.50U	2.00	0.50	ug/L
7440-50-8	**Copper**	**0.51J**	**2.00**	**0.50**	**ug/L**
7439-89-6	Iron	50.0U	200	50.0	ug/L
7439-92-1	Lead	0.50U	2.00	0.50	ug/L
7439-96-5	Manganese	2.50U	10.0	2.50	ug/L
7439-98-7	**Molybdenum**	**5.68**	**2.00**	**0.50**	**ug/L**
7440-02-0	Nickel	1.00U	4.00	1.00	ug/L
7440-09-7	**Potassium**	**5550**	**200**	**50.0**	**ug/L**
7782-49-2	**Selenium**	**7.00**	**2.00**	**0.50**	**ug/L**
7440-22-4	Silver	0.50U	2.00	0.50	ug/L
7440-28-0	Thallium	0.50U	2.00	0.50	ug/L
7440-32-6	Titanium	0.50U	2.00	0.50	ug/L
7440-62-2	**Vanadium**	**18.0**	**2.00**	**0.50**	**ug/L**
7440-66-6	Zinc	10.0U	40.0	10.0	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241608	**MA01MW004**	Water	04/24/2014 10:10	04/25/2014 09:15

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/25/2014 12:00	530978	EPA 7470A Dissolved	1	04/25/2014 18:51	PJS	531017

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.070U	0.20	0.070	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241608	**MA01MW004**	Water	04/24/2014 10:10	04/25/2014 09:15

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/25/2014 12:00	530978	EPA 7470A	1	04/25/2014 18:35	PJS	531017

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.070U	0.20	0.070	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241608	**MA01MW004**	Water	04/24/2014 10:10	04/25/2014 09:15

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/25/2014 15:40	530979	EPA 3005A Dissolved	50	05/03/2014 01:18	AWG	531511

CAS#	Parameter	Result	RDL	MDL	Units
7439-95-4	**Magnesium**	**34400**	**5000**	**1250**	**ug/L**
7440-23-5	**Sodium**	**300000**	**5000**	**1250**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241608	**MA01MW004**	Water	04/24/2014 10:10	04/25/2014 09:15

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/25/2014 15:40	530979	EPA 3005A Dissolved	2	05/03/2014 02:26	AWG	531511

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	10.0U	40.0	10.0	ug/L
7440-36-0	Antimony	1.00U	4.00	1.00	ug/L
7440-38-2	**Arsenic**	**1.22J**	**2.00**	**0.50**	**ug/L**
7440-39-3	**Barium**	**21.0**	**2.00**	**0.50**	**ug/L**
7440-41-7	Beryllium	0.50U	2.00	0.50	ug/L
7440-43-9	Cadmium	0.50U	2.00	0.50	ug/L
7440-70-2	**Calcium**	**42600**	**1000**	**250**	**ug/L**
7440-47-3	**Chromium**	**0.69J**	**2.00**	**0.50**	**ug/L**
7440-48-4	Cobalt	0.50U	2.00	0.50	ug/L
7439-89-6	Iron	50.0U	200	50.0	ug/L
7439-92-1	Lead	0.50U	2.00	0.50	ug/L
7439-96-5	Manganese	2.50U	10.0	2.50	ug/L
7439-98-7	**Molybdenum**	**5.73**	**2.00**	**0.50**	**ug/L**
7440-02-0	Nickel	1.00U	4.00	1.00	ug/L
7440-09-7	**Potassium**	**5540**	**200**	**50.0**	**ug/L**
7782-49-2	**Selenium**	**6.76**	**2.00**	**0.50**	**ug/L**
7440-22-4	Silver	0.50U	2.00	0.50	ug/L
7440-28-0	Thallium	0.50U	2.00	0.50	ug/L
7440-32-6	Titanium	0.50U	2.00	0.50	ug/L
7440-62-2	**Vanadium**	**17.8**	**2.00**	**0.50**	**ug/L**
7440-66-6	Zinc	10.0U	40.0	10.0	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241608	**MA01MW004**	Water	04/24/2014 10:10	04/25/2014 09:15

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/25/2014 15:40	530979	EPA 3005A Dissolved	2	05/06/2014 09:51	BAM	531759

CAS#	Parameter	Result	RDL	MDL	Units
7440-50-8	**Copper**	**0.69J**	**2.00**	**0.50**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241608	**MA01MW004**	Water	04/24/2014 10:10	04/25/2014 09:15

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/29/2014 16:54	JRM	531254

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	**Total Dissolved Solids(TDS)**	**888**	**10.0**	**4.39**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241608	**MA01MW004**	Water	04/24/2014 10:10	04/25/2014 09:15

EPA 353.2 Rev. 2

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/25/2014 16:18	AEL	531008

CAS#	Parameter	Result	RDL	MDL	Units
14797-65-0	Nitrite	0.006U	0.010	0.006	mg/L-N

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241608	**MA01MW004**	Water	04/24/2014 10:10	04/25/2014 09:15

EPA 353.2 Rev. 2

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			2	04/25/2014 16:05	AEL	531007

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	**Nitrate**	**0.504**	**0.020**	**0.016**	**mg/L-N**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241608	**MA01MW004**	Water	04/24/2014 10:10	04/25/2014 09:15

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			200	04/28/2014 21:06	AEL	531163

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	**Chloride**	**270**	**40.0**	**10.0**	**mg/L**
14808-79-8	**Sulfate**	**345**	**40.0**	**10.0**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241608	**MA01MW004**	Water	04/24/2014 10:10	04/25/2014 09:15

SM 2320 B-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/28/2014 10:10	JEM	531150

CAS#	Parameter	Result	RDL	MDL	Units
000000-00-5	**Total Alkalinity**	**196**	**1.0**	**0.26**	**mg/L CaCO3**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241608	**MA01MW004**	Water	04/24/2014 10:10	04/25/2014 09:15

EPA 9012B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/26/2014 12:00	530925	Cyanide Prep	1	04/29/2014 16:50	AEL	531266

CAS#	Parameter	Result	RDL	MDL	Units
57-12-5	**Cyanide**	**0.00080J**	**0.0050**	**0.00050**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241609	**M114MW003**	Water	04/24/2014 12:00	04/25/2014 09:15

Subcontract Data

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/19/2014 08:59	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-000	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241609	**M114MW003**	Water	04/24/2014 12:00	04/25/2014 09:15

Subcontract Data

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/19/2014 08:59	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-001	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241609	**M114MW003**	Water	04/24/2014 12:00	04/25/2014 09:15

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/05/2014 19:43	CLH	531681

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	1.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	0.123U	1.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	1.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	1.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	1.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.200U	1.00	0.200	ug/L
563-58-6	1,1-Dichloropropene	0.052U	1.00	0.052	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.079U	1.00	0.079	ug/L
96-18-4	1,2,3-Trichloropropane	0.065U	1.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	1.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.084U	1.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	1.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	1.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	1.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	1.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	1.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.066U	1.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	1.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	0.059U	1.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	1.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	0.170U	1.00	0.170	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	0.080U	1.00	0.080	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	0.124U	1.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	0.070U	1.00	0.070	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	1.00	0.111	ug/L
108-86-1	Bromobenzene	0.145U	1.00	0.145	ug/L
74-97-5	Bromochloromethane	0.127U	1.00	0.127	ug/L
75-27-4	Bromodichloromethane	0.083U	1.00	0.083	ug/L
75-25-2	Bromoform	0.215U	1.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	1.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	1.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	1.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	1.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	1.00	0.235	ug/L
67-66-3	Chloroform	0.155U	1.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	1.00	0.144	ug/L
74-95-3	Dibromomethane	0.211U	1.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	1.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	1.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	0.265U	1.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	1.00	0.130	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
91-20-3	Naphthalene	0.176U	1.00	0.176	ug/L
100-42-5	Styrene	0.089U	1.00	0.089	ug/L
127-18-4	Tetrachloroethene	0.193U	1.00	0.193	ug/L
108-88-3	Toluene	0.122U	1.00	0.122	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241609	**M114MW003**	Water	04/24/2014 12:00	04/25/2014 09:15

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/05/2014 19:43	CLH	531681

CAS#	Parameter	Result	RDL	MDL	Units
79-01-6	Trichloroethene	0.161U	1.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	1.00	0.157	ug/L
75-01-4	Vinyl chloride	0.127U	1.00	0.127	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	1.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	1.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	2.00	0.123	ug/L
104-51-8	n-Butylbenzene	0.123U	1.00	0.123	ug/L
103-65-1	n-Propylbenzene	0.727U	1.00	0.727	ug/L
95-47-6	o-Xylene	0.055U	1.00	0.055	ug/L
135-98-8	sec-Butylbenzene	0.107U	1.00	0.107	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L
98-06-6	tert-Butylbenzene	0.087U	1.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	0.077U	1.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	1.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	43.5	ug/L	87	75 - 120
1868-53-7	Dibromofluoromethane	50	51.8	ug/L	104	85 - 115
2037-26-5	Toluene d8	50	44.9	ug/L	90	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	60.2	ug/L	120	70 - 120

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241609	**M114MW003**	Water	04/24/2014 12:00	04/25/2014 09:15

EPA 8330A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/28/2014 03:00	531047	EPA 8330A	1	04/29/2014 00:56	HCP	531158

CAS#	Parameter	Result	RDL	MDL	Units
99-35-4	1,3,5-Trinitrobenzene	0.150U	1.00	0.150	ug/L
99-65-0	1,3-Dinitrobenzene	0.150U	1.00	0.150	ug/L
118-96-7	2,4,6-Trinitrotoluene	0.270U	1.00	0.270	ug/L
121-14-2	2,4-Dinitrotoluene	0.290U	1.00	0.290	ug/L
606-20-2	2,6-Dinitrotoluene	0.260U	1.00	0.260	ug/L
355-72-78-2	2-Amino-4,6-dinitrotoluene	0.300U	1.00	0.300	ug/L
88-72-2	2-Nitrotoluene	0.170U	1.00	0.170	ug/L
99-08-1	3-Nitrotoluene	0.330U	1.00	0.330	ug/L
1946-51-0	4-Amino-2,6-dinitrotoluene	0.360U	1.00	0.360	ug/L
99-99-0	4-Nitrotoluene	0.420U	1.00	0.420	ug/L
2691-41-0	HMX	0.130U	1.00	0.130	ug/L
98-95-3	Nitrobenzene	0.230U	1.00	0.230	ug/L
55-63-0	Nitroglycerin	0.380U	1.00	0.380	ug/L
78-11-5	Pentaerythritol Tetranitrate	0.590U	1.00	0.590	ug/L
121-82-4	RDX	0.170U	1.00	0.170	ug/L
479-45-8	Tetryl	0.240U	1.00	0.240	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
528-29-0	1,2-Dinitrobenzene	2	1.35	ug/L	68	60 - 140

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241609	**M114MW003**	Water	04/24/2014 12:00	04/25/2014 09:15

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/25/2014 15:35	530980	EPA 3010A	500	04/29/2014 20:48	BAM	531323

CAS#	Parameter	Result	RDL	MDL	Units
7439-95-4	**Magnesium**	**299000**	**50000**	**12500**	**ug/L**
7440-23-5	**Sodium**	**2710000**	**50000**	**12500**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241609	**M114MW003**	Water	04/24/2014 12:00	04/25/2014 09:15

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/25/2014 15:35	530980	EPA 3010A	10	04/30/2014 12:54	BAM	531323

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	50.0U	200	50.0	ug/L
7440-36-0	Antimony	5.00U	20.0	5.00	ug/L
7440-38-2	Arsenic	2.50U	10.0	2.50	ug/L
7440-39-3	**Barium**	**14.9**	**10.0**	**2.50**	**ug/L**
7440-41-7	Beryllium	2.50U	10.0	2.50	ug/L
7440-43-9	Cadmium	2.50U	10.0	2.50	ug/L
7440-70-2	**Calcium**	**414000**	**5000**	**1250**	**ug/L**
7440-47-3	Chromium	2.50U	10.0	2.50	ug/L
7440-48-4	Cobalt	2.50U	10.0	2.50	ug/L
7440-50-8	Copper	2.50U	10.0	2.50	ug/L
7439-89-6	Iron	250U	1000	250	ug/L
7439-92-1	Lead	2.50U	10.0	2.50	ug/L
7439-96-5	Manganese	12.5U	50.0	12.5	ug/L
7439-98-7	**Molybdenum**	**7.88J**	**10.0**	**2.50**	**ug/L**
7440-02-0	Nickel	5.00U	20.0	5.00	ug/L
7440-09-7	**Potassium**	**14600**	**1000**	**250**	**ug/L**
7782-49-2	**Selenium**	**32.8**	**10.0**	**2.50**	**ug/L**
7440-22-4	Silver	2.50U	10.0	2.50	ug/L
7440-28-0	Thallium	2.50U	10.0	2.50	ug/L
7440-32-6	Titanium	2.50U	10.0	2.50	ug/L
7440-62-2	**Vanadium**	**9.50J**	**10.0**	**2.50**	**ug/L**
7440-66-6	Zinc	50.0U	200	50.0	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241609	**M114MW003**	Water	04/24/2014 12:00	04/25/2014 09:15

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/25/2014 12:00	530978	EPA 7470A Dissolved	1	04/25/2014 18:53	PJS	531017

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.070U	0.20	0.070	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241609	**M114MW003**	Water	04/24/2014 12:00	04/25/2014 09:15

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/25/2014 12:00	530978	EPA 7470A	1	04/25/2014 18:44	PJS	531017

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.070U	0.20	0.070	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241609	**M114MW003**	Water	04/24/2014 12:00	04/25/2014 09:15

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/25/2014 15:40	530979	EPA 3005A Dissolved	500	05/03/2014 01:57	AWG	531511

CAS#	Parameter	Result	RDL	MDL	Units
7439-95-4	**Magnesium**	**277000**	**50000**	**12500**	**ug/L**
7440-23-5	**Sodium**	**2530000**	**50000**	**12500**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241609	**M114MW003**	Water	04/24/2014 12:00	04/25/2014 09:15

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/25/2014 15:40	530979	EPA 3005A Dissolved	10	05/03/2014 03:33	AWG	531511

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	50.0U	200	50.0	ug/L
7440-36-0	Antimony	5.00U	20.0	5.00	ug/L
7440-38-2	Arsenic	2.50U	10.0	2.50	ug/L
7440-39-3	**Barium**	**14.4**	**10.0**	**2.50**	**ug/L**
7440-41-7	Beryllium	2.50U	10.0	2.50	ug/L
7440-43-9	Cadmium	2.50U	10.0	2.50	ug/L
7440-70-2	**Calcium**	**425000**	**5000**	**1250**	**ug/L**
7440-47-3	Chromium	2.50U	10.0	2.50	ug/L
7440-48-4	Cobalt	2.50U	10.0	2.50	ug/L
7440-50-8	Copper	2.50U	10.0	2.50	ug/L
7439-89-6	Iron	250U	1000	250	ug/L
7439-92-1	Lead	2.50U	10.0	2.50	ug/L
7439-96-5	Manganese	12.5U	50.0	12.5	ug/L
7439-98-7	**Molybdenum**	**7.79J**	**10.0**	**2.50**	**ug/L**
7440-02-0	Nickel	5.00U	20.0	5.00	ug/L
7440-09-7	**Potassium**	**14600**	**1000**	**250**	**ug/L**
7782-49-2	**Selenium**	**30.0**	**10.0**	**2.50**	**ug/L**
7440-22-4	Silver	2.50U	10.0	2.50	ug/L
7440-28-0	Thallium	2.50U	10.0	2.50	ug/L
7440-32-6	Titanium	2.50U	10.0	2.50	ug/L
7440-62-2	**Vanadium**	**9.04J**	**10.0**	**2.50**	**ug/L**
7440-66-6	Zinc	50.0U	200	50.0	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241609	**M114MW003**	Water	04/24/2014 12:00	04/25/2014 09:15

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/28/2014 14:30	JRM	531134

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	**Total Dissolved Solids(TDS)**	**9310**	**10.0**	**4.39**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241609	**M114MW003**	Water	04/24/2014 12:00	04/25/2014 09:15

EPA 353.2 Rev. 2

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/25/2014 16:21	AEL	531008

CAS#	Parameter	Result	RDL	MDL	Units
14797-65-0	Nitrite	0.006U	0.010	0.006	mg/L-N

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241609	**M114MW003**	Water	04/24/2014 12:00	04/25/2014 09:15

EPA 353.2 Rev. 2

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/25/2014 15:57	AEL	531007

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	**Nitrate**	**0.723**	**0.010**	**0.008**	**mg/L-N**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241609	**M114MW003**	Water	04/24/2014 12:00	04/25/2014 09:15

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1000	04/28/2014 21:24	AEL	531163

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	**Chloride**	**4080**	**200**	**50.0**	**mg/L**
14808-79-8	**Sulfate**	**2170**	**200**	**50.0**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241609	**M114MW003**	Water	04/24/2014 12:00	04/25/2014 09:15

SM 2320 B-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/28/2014 10:10	JEM	531150

CAS#	Parameter	Result	RDL	MDL	Units
000000-00-5	**Total Alkalinity**	**56.9**	**1.0**	**0.26**	**mg/L CaCO3**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241609	**M114MW003**	Water	04/24/2014 12:00	04/25/2014 09:15

EPA 9012B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/26/2014 12:00	530925	Cyanide Prep	1	04/29/2014 16:51	AEL	531266

CAS#	Parameter	Result	RDL	MDL	Units
57-12-5	Cyanide	0.00050U	0.0050	0.00050	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241610	**TB-3**	Water	04/24/2014 10:10	04/25/2014 09:15

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/05/2014 12:35	LBH	531681

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	1.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	0.123U	1.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	1.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	1.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	1.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.200U	1.00	0.200	ug/L
563-58-6	1,1-Dichloropropene	0.052U	1.00	0.052	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.079U	1.00	0.079	ug/L
96-18-4	1,2,3-Trichloropropane	0.065U	1.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	1.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.084U	1.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	1.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	1.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	1.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	1.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	1.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.066U	1.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	1.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	0.059U	1.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	1.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	0.170U	1.00	0.170	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	0.080U	1.00	0.080	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	0.124U	1.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	0.070U	1.00	0.070	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	1.00	0.111	ug/L
108-86-1	Bromobenzene	0.145U	1.00	0.145	ug/L
74-97-5	Bromochloromethane	0.127U	1.00	0.127	ug/L
75-27-4	Bromodichloromethane	0.083U	1.00	0.083	ug/L
75-25-2	Bromoform	0.215U	1.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	1.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	1.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	1.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	1.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	1.00	0.235	ug/L
67-66-3	Chloroform	0.155U	1.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	1.00	0.144	ug/L
74-95-3	Dibromomethane	0.211U	1.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	1.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	1.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	0.265U	1.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	1.00	0.130	ug/L
75-09-2	**Methylene chloride**	**1.24J**	**5.00**	**0.149**	**ug/L**
91-20-3	Naphthalene	0.176U	1.00	0.176	ug/L
100-42-5	Styrene	0.089U	1.00	0.089	ug/L
127-18-4	Tetrachloroethene	0.193U	1.00	0.193	ug/L
108-88-3	Toluene	0.122U	1.00	0.122	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241610	**TB-3**	Water	04/24/2014 10:10	04/25/2014 09:15

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/05/2014 12:35	LBH	531681

CAS#	Parameter	Result	RDL	MDL	Units
79-01-6	Trichloroethene	0.161U	1.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	1.00	0.157	ug/L
75-01-4	Vinyl chloride	0.127U	1.00	0.127	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	1.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	1.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	2.00	0.123	ug/L
104-51-8	n-Butylbenzene	0.123U	1.00	0.123	ug/L
103-65-1	n-Propylbenzene	0.727U	1.00	0.727	ug/L
95-47-6	o-Xylene	0.055U	1.00	0.055	ug/L
135-98-8	sec-Butylbenzene	0.107U	1.00	0.107	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L
98-06-6	tert-Butylbenzene	0.087U	1.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	0.077U	1.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	1.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	49.1	ug/L	98	75 - 120
1868-53-7	Dibromofluoromethane	50	50.4	ug/L	101	85 - 115
2037-26-5	Toluene d8	50	48.1	ug/L	96	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	48.4	ug/L	97	70 - 120

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241611	**M114MW002**	Water	04/24/2014 13:08	04/25/2014 09:15

Subcontract Data

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/19/2014 09:00	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-000	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241611	**M114MW002**	Water	04/24/2014 13:08	04/25/2014 09:15

Subcontract Data

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/19/2014 09:00	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-001	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241611	**M114MW002**	Water	04/24/2014 13:08	04/25/2014 09:15

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2014 17:02	CLH	531830

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	1.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	0.123U	1.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	1.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	1.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	1.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.200U	1.00	0.200	ug/L
563-58-6	1,1-Dichloropropene	0.052U	1.00	0.052	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.079U	1.00	0.079	ug/L
96-18-4	1,2,3-Trichloropropane	0.065U	1.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	1.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.084U	1.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	1.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	1.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	1.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	1.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	1.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.066U	1.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	1.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	0.059U	1.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	1.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	0.170U	1.00	0.170	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	0.080U	1.00	0.080	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	0.124U	1.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	0.070U	1.00	0.070	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	1.00	0.111	ug/L
108-86-1	Bromobenzene	0.145U	1.00	0.145	ug/L
74-97-5	Bromochloromethane	0.127U	1.00	0.127	ug/L
75-27-4	Bromodichloromethane	0.083U	1.00	0.083	ug/L
75-25-2	Bromoform	0.215U	1.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	1.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	1.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	1.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	1.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	1.00	0.235	ug/L
67-66-3	Chloroform	0.155U	1.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	1.00	0.144	ug/L
74-95-3	Dibromomethane	0.211U	1.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	1.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	1.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	0.265U	1.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	1.00	0.130	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
91-20-3	Naphthalene	0.176U	1.00	0.176	ug/L
100-42-5	Styrene	0.089U	1.00	0.089	ug/L
127-18-4	Tetrachloroethene	0.193U	1.00	0.193	ug/L
108-88-3	Toluene	0.122U	1.00	0.122	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241611	**M114MW002**	Water	04/24/2014 13:08	04/25/2014 09:15

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2014 17:02	CLH	531830

CAS#	Parameter	Result	RDL	MDL	Units
79-01-6	Trichloroethene	0.161U	1.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	1.00	0.157	ug/L
75-01-4	Vinyl chloride	0.127U	1.00	0.127	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	1.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	1.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	2.00	0.123	ug/L
104-51-8	n-Butylbenzene	0.123U	1.00	0.123	ug/L
103-65-1	n-Propylbenzene	0.727U	1.00	0.727	ug/L
95-47-6	o-Xylene	0.055U	1.00	0.055	ug/L
135-98-8	sec-Butylbenzene	0.107U	1.00	0.107	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L
98-06-6	tert-Butylbenzene	0.087U	1.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	0.077U	1.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	1.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	49	ug/L	98	75 - 120
1868-53-7	Dibromofluoromethane	50	50.6	ug/L	101	85 - 115
2037-26-5	Toluene d8	50	50.6	ug/L	101	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	51.2	ug/L	102	70 - 120

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241611	**M114MW002**	Water	04/24/2014 13:08	04/25/2014 09:15

EPA 8330A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/28/2014 03:00	531047	EPA 8330A	1	04/29/2014 02:00	HCP	531158

CAS#	Parameter	Result	RDL	MDL	Units
99-35-4	1,3,5-Trinitrobenzene	0.150U	1.00	0.150	ug/L
99-65-0	1,3-Dinitrobenzene	0.150U	1.00	0.150	ug/L
118-96-7	2,4,6-Trinitrotoluene	0.270U	1.00	0.270	ug/L
121-14-2	2,4-Dinitrotoluene	0.290U	1.00	0.290	ug/L
606-20-2	2,6-Dinitrotoluene	0.260U	1.00	0.260	ug/L
355-72-78-2	2-Amino-4,6-dinitrotoluene	0.300U	1.00	0.300	ug/L
88-72-2	2-Nitrotoluene	0.170U	1.00	0.170	ug/L
99-08-1	3-Nitrotoluene	0.330U	1.00	0.330	ug/L
1946-51-0	4-Amino-2,6-dinitrotoluene	0.360U	1.00	0.360	ug/L
99-99-0	4-Nitrotoluene	0.420U	1.00	0.420	ug/L
2691-41-0	HMX	0.130U	1.00	0.130	ug/L
98-95-3	Nitrobenzene	0.230U	1.00	0.230	ug/L
55-63-0	Nitroglycerin	0.380U	1.00	0.380	ug/L
78-11-5	Pentaerythritol Tetranitrate	0.590U	1.00	0.590	ug/L
121-82-4	RDX	0.170U	1.00	0.170	ug/L
479-45-8	Tetryl	0.240U	1.00	0.240	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
528-29-0	1,2-Dinitrobenzene	2	1.32	ug/L	66	60 - 140

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241611	**M114MW002**	Water	04/24/2014 13:08	04/25/2014 09:15

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/25/2014 15:35	530980	EPA 3010A	500	04/29/2014 20:56	BAM	531323

CAS#	Parameter	Result	RDL	MDL	Units
7439-95-4	**Magnesium**	**288000**	**50000**	**12500**	**ug/L**
7440-23-5	**Sodium**	**2320000**	**50000**	**12500**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241611	**M114MW002**	Water	04/24/2014 13:08	04/25/2014 09:15

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/25/2014 15:35	530980	EPA 3010A	10	04/30/2014 13:01	BAM	531323

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	50.0U	200	50.0	ug/L
7440-36-0	Antimony	5.00U	20.0	5.00	ug/L
7440-38-2	Arsenic	2.50U	10.0	2.50	ug/L
7440-39-3	**Barium**	**15.3**	**10.0**	**2.50**	**ug/L**
7440-41-7	Beryllium	2.50U	10.0	2.50	ug/L
7440-43-9	Cadmium	2.50U	10.0	2.50	ug/L
7440-70-2	**Calcium**	**355000**	**5000**	**1250**	**ug/L**
7440-47-3	Chromium	2.50U	10.0	2.50	ug/L
7440-48-4	Cobalt	2.50U	10.0	2.50	ug/L
7440-50-8	Copper	2.50U	10.0	2.50	ug/L
7439-89-6	Iron	250U	1000	250	ug/L
7439-92-1	Lead	2.50U	10.0	2.50	ug/L
7439-96-5	Manganese	12.5U	50.0	12.5	ug/L
7439-98-7	**Molybdenum**	**12.9**	**10.0**	**2.50**	**ug/L**
7440-02-0	Nickel	5.00U	20.0	5.00	ug/L
7440-09-7	**Potassium**	**14500**	**1000**	**250**	**ug/L**
7782-49-2	**Selenium**	**18.0**	**10.0**	**2.50**	**ug/L**
7440-22-4	Silver	2.50U	10.0	2.50	ug/L
7440-28-0	Thallium	2.50U	10.0	2.50	ug/L
7440-32-6	Titanium	2.50U	10.0	2.50	ug/L
7440-62-2	**Vanadium**	**8.14J**	**10.0**	**2.50**	**ug/L**
7440-66-6	Zinc	50.0U	200	50.0	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241611	**M114MW002**	Water	04/24/2014 13:08	04/25/2014 09:15

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/25/2014 12:00	530978	EPA 7470A Dissolved	1	04/25/2014 18:55	PJS	531017

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.070U	0.20	0.070	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241611	**M114MW002**	Water	04/24/2014 13:08	04/25/2014 09:15

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/25/2014 12:00	530978	EPA 7470A	1	04/25/2014 18:46	PJS	531017

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.070U	0.20	0.070	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241611	**M114MW002**	Water	04/24/2014 13:08	04/25/2014 09:15

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/25/2014 15:40	530979	EPA 3005A Dissolved	500	05/03/2014 02:07	AWG	531511

CAS#	Parameter	Result	RDL	MDL	Units
7439-95-4	**Magnesium**	**275000**	**50000**	**12500**	**ug/L**
7440-23-5	**Sodium**	**2230000**	**50000**	**12500**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241611	**M114MW002**	Water	04/24/2014 13:08	04/25/2014 09:15

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/25/2014 15:40	530979	EPA 3005A Dissolved	10	05/03/2014 03:43	AWG	531511

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	50.0U	200	50.0	ug/L
7440-36-0	Antimony	5.00U	20.0	5.00	ug/L
7440-38-2	Arsenic	2.50U	10.0	2.50	ug/L
7440-39-3	**Barium**	**16.3**	**10.0**	**2.50**	**ug/L**
7440-41-7	Beryllium	2.50U	10.0	2.50	ug/L
7440-43-9	Cadmium	2.50U	10.0	2.50	ug/L
7440-70-2	**Calcium**	**340000**	**5000**	**1250**	**ug/L**
7440-47-3	Chromium	2.50U	10.0	2.50	ug/L
7440-48-4	Cobalt	2.50U	10.0	2.50	ug/L
7440-50-8	Copper	2.50U	10.0	2.50	ug/L
7439-89-6	Iron	250U	1000	250	ug/L
7439-92-1	Lead	2.50U	10.0	2.50	ug/L
7439-96-5	Manganese	12.5U	50.0	12.5	ug/L
7439-98-7	**Molybdenum**	**14.5**	**10.0**	**2.50**	**ug/L**
7440-02-0	Nickel	5.00U	20.0	5.00	ug/L
7440-09-7	**Potassium**	**14700**	**1000**	**250**	**ug/L**
7782-49-2	**Selenium**	**16.9**	**10.0**	**2.50**	**ug/L**
7440-22-4	Silver	2.50U	10.0	2.50	ug/L
7440-28-0	Thallium	2.50U	10.0	2.50	ug/L
7440-32-6	Titanium	2.50U	10.0	2.50	ug/L
7440-62-2	**Vanadium**	**7.10J**	**10.0**	**2.50**	**ug/L**
7440-66-6	Zinc	50.0U	200	50.0	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241611	**M114MW002**	Water	04/24/2014 13:08	04/25/2014 09:15

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/28/2014 15:45	JRM	531133

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	**Total Dissolved Solids(TDS)**	**7810**	**10.0**	**4.39**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241611	**M114MW002**	Water	04/24/2014 13:08	04/25/2014 09:15

EPA 353.2 Rev. 2

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/25/2014 16:23	AEL	531008

CAS#	Parameter	Result	RDL	MDL	Units
14797-65-0	Nitrite	0.006U	0.010	0.006	mg/L-N

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241611	**M114MW002**	Water	04/24/2014 13:08	04/25/2014 09:15

EPA 353.2 Rev. 2

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/25/2014 15:58	AEL	531007

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	**Nitrate**	**0.224**	**0.010**	**0.008**	**mg/L-N**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241611	**M114MW002**	Water	04/24/2014 13:08	04/25/2014 09:15

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			2000	04/28/2014 21:41	AEL	531163

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	**Chloride**	**3800**	**400**	**100**	**mg/L**
14808-79-8	**Sulfate**	**1980**	**400**	**100**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241611	**M114MW002**	Water	04/24/2014 13:08	04/25/2014 09:15

SM 2320 B-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/28/2014 10:10	JEM	531150

CAS#	Parameter	Result	RDL	MDL	Units
000000-00-5	**Total Alkalinity**	**66.7**	**1.0**	**0.26**	**mg/L CaCO3**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241611	**M114MW002**	Water	04/24/2014 13:08	04/25/2014 09:15

EPA 9012B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/26/2014 12:00	530925	Cyanide Prep	1	04/29/2014 16:51	AEL	531266

CAS#	Parameter	Result	RDL	MDL	Units
57-12-5	Cyanide	0.00050U	0.0050	0.00050	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241612	**M114MW001**	Water	04/24/2014 14:30	04/25/2014 09:15

Subcontract Data

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/19/2014 09:00	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-000	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241612	**M114MW001**	Water	04/24/2014 14:30	04/25/2014 09:15

Subcontract Data

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/19/2014 09:00	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-001	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241612	**M114MW001**	Water	04/24/2014 14:30	04/25/2014 09:15

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2014 17:23	CLH	531830

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	1.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	0.123U	1.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	1.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	1.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	1.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.200U	1.00	0.200	ug/L
563-58-6	1,1-Dichloropropene	0.052U	1.00	0.052	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.079U	1.00	0.079	ug/L
96-18-4	1,2,3-Trichloropropane	0.065U	1.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	1.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.084U	1.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	1.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	1.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	1.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	1.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	1.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.066U	1.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	1.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	0.059U	1.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	1.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	0.170U	1.00	0.170	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	0.080U	1.00	0.080	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	0.124U	1.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	0.070U	1.00	0.070	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	1.00	0.111	ug/L
108-86-1	Bromobenzene	0.145U	1.00	0.145	ug/L
74-97-5	Bromochloromethane	0.127U	1.00	0.127	ug/L
75-27-4	Bromodichloromethane	0.083U	1.00	0.083	ug/L
75-25-2	Bromoform	0.215U	1.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	1.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	1.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	1.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	1.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	1.00	0.235	ug/L
67-66-3	Chloroform	0.155U	1.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	1.00	0.144	ug/L
74-95-3	Dibromomethane	0.211U	1.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	1.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	1.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	0.265U	1.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	1.00	0.130	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
91-20-3	Naphthalene	0.176U	1.00	0.176	ug/L
100-42-5	Styrene	0.089U	1.00	0.089	ug/L
127-18-4	Tetrachloroethene	0.193U	1.00	0.193	ug/L
108-88-3	Toluene	0.122U	1.00	0.122	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241612	**M114MW001**	Water	04/24/2014 14:30	04/25/2014 09:15

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2014 17:23	CLH	531830

CAS#	Parameter	Result	RDL	MDL	Units
79-01-6	Trichloroethene	0.161U	1.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	1.00	0.157	ug/L
75-01-4	Vinyl chloride	0.127U	1.00	0.127	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	1.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	1.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	2.00	0.123	ug/L
104-51-8	n-Butylbenzene	0.123U	1.00	0.123	ug/L
103-65-1	n-Propylbenzene	0.727U	1.00	0.727	ug/L
95-47-6	o-Xylene	0.055U	1.00	0.055	ug/L
135-98-8	sec-Butylbenzene	0.107U	1.00	0.107	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L
98-06-6	tert-Butylbenzene	0.087U	1.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	0.077U	1.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	1.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	48.9	ug/L	98	75 - 120
1868-53-7	Dibromofluoromethane	50	50.3	ug/L	101	85 - 115
2037-26-5	Toluene d8	50	51.4	ug/L	103	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	50.1	ug/L	100	70 - 120

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241612	**M114MW001**	Water	04/24/2014 14:30	04/25/2014 09:15

EPA 8330A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/28/2014 03:00	531047	EPA 8330A	1	04/29/2014 03:04	HCP	531158

CAS#	Parameter	Result	RDL	MDL	Units
99-35-4	1,3,5-Trinitrobenzene	0.150U	1.00	0.150	ug/L
99-65-0	1,3-Dinitrobenzene	0.150U	1.00	0.150	ug/L
118-96-7	2,4,6-Trinitrotoluene	0.270U	1.00	0.270	ug/L
121-14-2	2,4-Dinitrotoluene	0.290U	1.00	0.290	ug/L
606-20-2	2,6-Dinitrotoluene	0.260U	1.00	0.260	ug/L
355-72-78-2	2-Amino-4,6-dinitrotoluene	0.300U	1.00	0.300	ug/L
88-72-2	2-Nitrotoluene	0.170U	1.00	0.170	ug/L
99-08-1	3-Nitrotoluene	0.330U	1.00	0.330	ug/L
1946-51-0	4-Amino-2,6-dinitrotoluene	0.360U	1.00	0.360	ug/L
99-99-0	4-Nitrotoluene	0.420U	1.00	0.420	ug/L
2691-41-0	HMX	0.130U	1.00	0.130	ug/L
98-95-3	Nitrobenzene	0.230U	1.00	0.230	ug/L
55-63-0	Nitroglycerin	0.380U	1.00	0.380	ug/L
78-11-5	Pentaerythritol Tetranitrate	0.590U	1.00	0.590	ug/L
121-82-4	RDX	0.170U	1.00	0.170	ug/L
479-45-8	Tetryl	0.240U	1.00	0.240	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
528-29-0	1,2-Dinitrobenzene	2	1.58	ug/L	79	60 - 140

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241612	**M114MW001**	Water	04/24/2014 14:30	04/25/2014 09:15

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/25/2014 15:35	530980	EPA 3010A	500	04/29/2014 21:04	BAM	531323

CAS#	Parameter	Result	RDL	MDL	Units
7439-95-4	**Magnesium**	**294000**	**50000**	**12500**	**ug/L**
7440-23-5	**Sodium**	**2390000**	**50000**	**12500**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241612	**M114MW001**	Water	04/24/2014 14:30	04/25/2014 09:15

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/25/2014 15:35	530980	EPA 3010A	10	04/30/2014 13:09	BAM	531323

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	50.0U	200	50.0	ug/L
7440-36-0	Antimony	5.00U	20.0	5.00	ug/L
7440-38-2	Arsenic	2.50U	10.0	2.50	ug/L
7440-39-3	**Barium**	**18.0**	**10.0**	**2.50**	**ug/L**
7440-41-7	Beryllium	2.50U	10.0	2.50	ug/L
7440-43-9	Cadmium	2.50U	10.0	2.50	ug/L
7440-70-2	**Calcium**	**382000**	**5000**	**1250**	**ug/L**
7440-47-3	Chromium	2.50U	10.0	2.50	ug/L
7440-48-4	Cobalt	2.50U	10.0	2.50	ug/L
7440-50-8	Copper	2.50U	10.0	2.50	ug/L
7439-89-6	Iron	250U	1000	250	ug/L
7439-92-1	Lead	2.50U	10.0	2.50	ug/L
7439-96-5	Manganese	12.5U	50.0	12.5	ug/L
7439-98-7	**Molybdenum**	**11.0**	**10.0**	**2.50**	**ug/L**
7440-02-0	Nickel	5.00U	20.0	5.00	ug/L
7440-09-7	**Potassium**	**14700**	**1000**	**250**	**ug/L**
7782-49-2	**Selenium**	**34.1**	**10.0**	**2.50**	**ug/L**
7440-22-4	Silver	2.50U	10.0	2.50	ug/L
7440-28-0	Thallium	2.50U	10.0	2.50	ug/L
7440-32-6	Titanium	2.50U	10.0	2.50	ug/L
7440-62-2	**Vanadium**	**6.05J**	**10.0**	**2.50**	**ug/L**
7440-66-6	Zinc	50.0U	200	50.0	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241612	**M114MW001**	Water	04/24/2014 14:30	04/25/2014 09:15

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/25/2014 12:00	530978	EPA 7470A Dissolved	1	04/25/2014 18:57	PJS	531017

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.070U	0.20	0.070	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241612	**M114MW001**	Water	04/24/2014 14:30	04/25/2014 09:15

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/25/2014 12:00	530978	EPA 7470A	1	04/25/2014 18:48	PJS	531017

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.070U	0.20	0.070	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241612	**M114MW001**	Water	04/24/2014 14:30	04/25/2014 09:15

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/25/2014 15:40	530979	EPA 3005A Dissolved	500	05/03/2014 02:16	AWG	531511

CAS#	Parameter	Result	RDL	MDL	Units
7439-95-4	**Magnesium**	**277000**	**50000**	**12500**	**ug/L**
7440-23-5	**Sodium**	**2290000**	**50000**	**12500**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241612	**M114MW001**	Water	04/24/2014 14:30	04/25/2014 09:15

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/25/2014 15:40	530979	EPA 3005A Dissolved	10	05/03/2014 03:52	AWG	531511

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	50.0U	200	50.0	ug/L
7440-36-0	Antimony	5.00U	20.0	5.00	ug/L
7440-38-2	Arsenic	2.50U	10.0	2.50	ug/L
7440-39-3	**Barium**	**18.3**	**10.0**	**2.50**	**ug/L**
7440-41-7	Beryllium	2.50U	10.0	2.50	ug/L
7440-43-9	Cadmium	2.50U	10.0	2.50	ug/L
7440-70-2	**Calcium**	**401000**	**5000**	**1250**	**ug/L**
7440-47-3	Chromium	2.50U	10.0	2.50	ug/L
7440-48-4	Cobalt	2.50U	10.0	2.50	ug/L
7440-50-8	Copper	2.50U	10.0	2.50	ug/L
7439-89-6	Iron	250U	1000	250	ug/L
7439-92-1	Lead	2.50U	10.0	2.50	ug/L
7439-96-5	Manganese	12.5U	50.0	12.5	ug/L
7439-98-7	**Molybdenum**	**11.8**	**10.0**	**2.50**	**ug/L**
7440-02-0	Nickel	5.00U	20.0	5.00	ug/L
7440-09-7	**Potassium**	**15100**	**1000**	**250**	**ug/L**
7782-49-2	**Selenium**	**30.9**	**10.0**	**2.50**	**ug/L**
7440-22-4	Silver	2.50U	10.0	2.50	ug/L
7440-28-0	Thallium	2.50U	10.0	2.50	ug/L
7440-32-6	Titanium	2.50U	10.0	2.50	ug/L
7440-62-2	**Vanadium**	**5.76J**	**10.0**	**2.50**	**ug/L**
7440-66-6	Zinc	50.0U	200	50.0	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241612	**M114MW001**	Water	04/24/2014 14:30	04/25/2014 09:15

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/28/2014 14:30	JRM	531134

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	**Total Dissolved Solids(TDS)**	**8840**	**10.0**	**4.39**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241612	**M114MW001**	Water	04/24/2014 14:30	04/25/2014 09:15

EPA 353.2 Rev. 2

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/25/2014 16:24	AEL	531008

CAS#	Parameter	Result	RDL	MDL	Units
14797-65-0	Nitrite	0.006U	0.010	0.006	mg/L-N

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241612	**M114MW001**	Water	04/24/2014 14:30	04/25/2014 09:15

EPA 353.2 Rev. 2

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/25/2014 15:59	AEL	531007

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	**Nitrate**	**0.965**	**0.010**	**0.008**	**mg/L-N**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241612	**M114MW001**	Water	04/24/2014 14:30	04/25/2014 09:15

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1000	04/28/2014 21:59	AEL	531163

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	**Chloride**	**3750**	**200**	**50.0**	**mg/L**
14808-79-8	**Sulfate**	**2010**	**200**	**50.0**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241612	**M114MW001**	Water	04/24/2014 14:30	04/25/2014 09:15

SM 2320 B-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/28/2014 10:10	JEM	531150

CAS#	Parameter	Result	RDL	MDL	Units
000000-00-5	**Total Alkalinity**	**64.8**	**1.0**	**0.26**	**mg/L CaCO3**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241612	**M114MW001**	Water	04/24/2014 14:30	04/25/2014 09:15

EPA 9012B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/26/2014 12:00	530925	Cyanide Prep	1	04/29/2014 16:52	AEL	531266

CAS#	Parameter	Result	RDL	MDL	Units
57-12-5	Cyanide	0.00050U	0.0050	0.00050	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241613	**TB-4**	Water	04/24/2014 13:08	04/25/2014 09:15

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/05/2014 12:59	LBH	531681

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	1.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	0.123U	1.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	1.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	1.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	1.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.200U	1.00	0.200	ug/L
563-58-6	1,1-Dichloropropene	0.052U	1.00	0.052	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.079U	1.00	0.079	ug/L
96-18-4	1,2,3-Trichloropropane	0.065U	1.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	1.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.084U	1.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	1.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	1.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	1.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	1.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	1.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.066U	1.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	1.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	0.059U	1.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	1.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	0.170U	1.00	0.170	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	0.080U	1.00	0.080	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	0.124U	1.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	0.070U	1.00	0.070	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	1.00	0.111	ug/L
108-86-1	Bromobenzene	0.145U	1.00	0.145	ug/L
74-97-5	Bromochloromethane	0.127U	1.00	0.127	ug/L
75-27-4	Bromodichloromethane	0.083U	1.00	0.083	ug/L
75-25-2	Bromoform	0.215U	1.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	1.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	1.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	1.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	1.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	1.00	0.235	ug/L
67-66-3	Chloroform	0.155U	1.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	1.00	0.144	ug/L
74-95-3	Dibromomethane	0.211U	1.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	1.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	1.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	0.265U	1.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	1.00	0.130	ug/L
75-09-2	**Methylene chloride**	**1.24J**	**5.00**	**0.149**	**ug/L**
91-20-3	Naphthalene	0.176U	1.00	0.176	ug/L
100-42-5	Styrene	0.089U	1.00	0.089	ug/L
127-18-4	Tetrachloroethene	0.193U	1.00	0.193	ug/L
108-88-3	Toluene	0.122U	1.00	0.122	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241613	**TB-4**	Water	04/24/2014 13:08	04/25/2014 09:15

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/05/2014 12:59	LBH	531681

CAS#	Parameter	Result	RDL	MDL	Units
79-01-6	Trichloroethene	0.161U	1.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	1.00	0.157	ug/L
75-01-4	Vinyl chloride	0.127U	1.00	0.127	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	1.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	1.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	2.00	0.123	ug/L
104-51-8	n-Butylbenzene	0.123U	1.00	0.123	ug/L
103-65-1	n-Propylbenzene	0.727U	1.00	0.727	ug/L
95-47-6	o-Xylene	0.055U	1.00	0.055	ug/L
135-98-8	sec-Butylbenzene	0.107U	1.00	0.107	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L
98-06-6	tert-Butylbenzene	0.087U	1.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	0.077U	1.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	1.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	47.8	ug/L	96	75 - 120
1868-53-7	Dibromofluoromethane	50	49	ug/L	98	85 - 115
2037-26-5	Toluene d8	50	49.8	ug/L	100	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	49.8	ug/L	100	70 - 120

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241614	**M114MW004**	Water	04/25/2014 09:25	04/26/2014 09:45

Subcontract Data

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/19/2014 09:00	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-000	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241614	**M114MW004**	Water	04/25/2014 09:25	04/26/2014 09:45

Subcontract Data

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/19/2014 09:01	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-001	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241614	**M114MW004**	Water	04/25/2014 09:25	04/26/2014 09:45

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2014 17:43	CLH	531830

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	1.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	0.123U	1.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	1.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	1.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	1.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.200U	1.00	0.200	ug/L
563-58-6	1,1-Dichloropropene	0.052U	1.00	0.052	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.079U	1.00	0.079	ug/L
96-18-4	1,2,3-Trichloropropane	0.065U	1.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	1.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.084U	1.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	1.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	1.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	1.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	1.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	1.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.066U	1.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	1.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	0.059U	1.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	1.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	0.170U	1.00	0.170	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	0.080U	1.00	0.080	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	0.124U	1.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	0.070U	1.00	0.070	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	1.00	0.111	ug/L
108-86-1	Bromobenzene	0.145U	1.00	0.145	ug/L
74-97-5	Bromochloromethane	0.127U	1.00	0.127	ug/L
75-27-4	Bromodichloromethane	0.083U	1.00	0.083	ug/L
75-25-2	Bromoform	0.215U	1.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	1.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	1.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	1.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	1.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	1.00	0.235	ug/L
67-66-3	Chloroform	0.155U	1.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	1.00	0.144	ug/L
74-95-3	Dibromomethane	0.211U	1.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	1.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	1.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	0.265U	1.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	1.00	0.130	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
91-20-3	Naphthalene	0.176U	1.00	0.176	ug/L
100-42-5	Styrene	0.089U	1.00	0.089	ug/L
127-18-4	Tetrachloroethene	0.193U	1.00	0.193	ug/L
108-88-3	Toluene	0.122U	1.00	0.122	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241614	**M114MW004**	Water	04/25/2014 09:25	04/26/2014 09:45

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2014 17:43	CLH	531830

CAS#	Parameter	Result	RDL	MDL	Units
79-01-6	Trichloroethene	0.161U	1.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	1.00	0.157	ug/L
75-01-4	Vinyl chloride	0.127U	1.00	0.127	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	1.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	1.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	2.00	0.123	ug/L
104-51-8	n-Butylbenzene	0.123U	1.00	0.123	ug/L
103-65-1	n-Propylbenzene	0.727U	1.00	0.727	ug/L
95-47-6	o-Xylene	0.055U	1.00	0.055	ug/L
135-98-8	sec-Butylbenzene	0.107U	1.00	0.107	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L
98-06-6	tert-Butylbenzene	0.087U	1.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	0.077U	1.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	1.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	49.4	ug/L	99	75 - 120
1868-53-7	Dibromofluoromethane	50	50.5	ug/L	101	85 - 115
2037-26-5	Toluene d8	50	51.8	ug/L	104	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	51.3	ug/L	103	70 - 120

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241614	**M114MW004**	Water	04/25/2014 09:25	04/26/2014 09:45

EPA 8330A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/28/2014 03:00	531047	EPA 8330A	1	04/29/2014 04:08	HCP	531158

CAS#	Parameter	Result	RDL	MDL	Units
99-35-4	1,3,5-Trinitrobenzene	0.150U	1.00	0.150	ug/L
99-65-0	1,3-Dinitrobenzene	0.150U	1.00	0.150	ug/L
118-96-7	2,4,6-Trinitrotoluene	0.270U	1.00	0.270	ug/L
121-14-2	2,4-Dinitrotoluene	0.290U	1.00	0.290	ug/L
606-20-2	2,6-Dinitrotoluene	0.260U	1.00	0.260	ug/L
355-72-78-2	2-Amino-4,6-dinitrotoluene	0.300U	1.00	0.300	ug/L
88-72-2	2-Nitrotoluene	0.170U	1.00	0.170	ug/L
99-08-1	3-Nitrotoluene	0.330U	1.00	0.330	ug/L
1946-51-0	4-Amino-2,6-dinitrotoluene	0.360U	1.00	0.360	ug/L
99-99-0	4-Nitrotoluene	0.420U	1.00	0.420	ug/L
2691-41-0	HMX	0.130U	1.00	0.130	ug/L
98-95-3	Nitrobenzene	0.230U	1.00	0.230	ug/L
55-63-0	Nitroglycerin	0.380U	1.00	0.380	ug/L
78-11-5	Pentaerythritol Tetranitrate	0.590U	1.00	0.590	ug/L
121-82-4	RDX	0.170U	1.00	0.170	ug/L
479-45-8	Tetryl	0.240U	1.00	0.240	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
528-29-0	1,2-Dinitrobenzene	2	1.4	ug/L	70	60 - 140

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241614	**M114MW004**	Water	04/25/2014 09:25	04/26/2014 09:45

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/28/2014 11:50	531126	EPA 3010A	5	05/03/2014 09:52	AWG	531679

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	25.0U	100	25.0	ug/L
7440-36-0	Antimony	2.50U	10.0	2.50	ug/L
7440-38-2	Arsenic	1.25U	5.00	1.25	ug/L
7440-39-3	**Barium**	**16.6**	**5.00**	**1.25**	**ug/L**
7440-41-7	Beryllium	1.25U	5.00	1.25	ug/L
7440-43-9	Cadmium	1.25U	5.00	1.25	ug/L
7440-47-3	Chromium	1.25U	5.00	1.25	ug/L
7440-48-4	Cobalt	1.25U	5.00	1.25	ug/L
7440-50-8	Copper	1.25U	5.00	1.25	ug/L
7439-89-6	Iron	125U	500	125	ug/L
7439-92-1	Lead	1.25U	5.00	1.25	ug/L
7439-96-5	Manganese	6.25U	25.0	6.25	ug/L
7439-98-7	**Molybdenum**	**11.9**	**5.00**	**1.25**	**ug/L**
7440-02-0	Nickel	2.50U	10.0	2.50	ug/L
7440-09-7	**Potassium**	**16300**	**500**	**125**	**ug/L**
7782-49-2	**Selenium**	**23.8**	**5.00**	**1.25**	**ug/L**
7440-22-4	Silver	1.25U	5.00	1.25	ug/L
7440-28-0	Thallium	1.25U	5.00	1.25	ug/L
7440-32-6	Titanium	1.25U	5.00	1.25	ug/L
7440-62-2	**Vanadium**	**6.68**	**5.00**	**1.25**	**ug/L**
7440-66-6	**Zinc**	**64.3J**	**100**	**25.0**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241614	**M114MW004**	Water	04/25/2014 09:25	04/26/2014 09:45

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/28/2014 11:50	531126	EPA 3010A	500	05/05/2014 19:58	BAM	531682

CAS#	Parameter	Result	RDL	MDL	Units
7440-70-2	**Calcium**	**461000**	**250000**	**62500**	**ug/L**
7439-95-4	**Magnesium**	**328000**	**50000**	**12500**	**ug/L**
7440-23-5	**Sodium**	**2530000**	**50000**	**12500**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241614	**M114MW004**	Water	04/25/2014 09:25	04/26/2014 09:45

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/28/2014 14:30	531125	EPA 7470A Dissolved	1	04/28/2014 20:51	CMB	531182

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.070U	0.20	0.070	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241614	**M114MW004**	Water	04/25/2014 09:25	04/26/2014 09:45

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/28/2014 14:30	531125	EPA 7470A	1	04/28/2014 20:49	CMB	531182

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.070U	0.20	0.070	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241614	**M114MW004**	Water	04/25/2014 09:25	04/26/2014 09:45

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/29/2014 09:00	531123	EPA 3005A Dissolved	5	05/03/2014 13:34	AWG	531679

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	25.0U	100	25.0	ug/L
7440-36-0	Antimony	2.50U	10.0	2.50	ug/L
7440-38-2	Arsenic	1.25U	5.00	1.25	ug/L
7440-39-3	**Barium**	**16.3**	**5.00**	**1.25**	**ug/L**
7440-41-7	Beryllium	1.25U	5.00	1.25	ug/L
7440-43-9	Cadmium	1.25U	5.00	1.25	ug/L
7440-47-3	Chromium	1.25U	5.00	1.25	ug/L
7440-48-4	Cobalt	1.25U	5.00	1.25	ug/L
7440-50-8	Copper	1.25U	5.00	1.25	ug/L
7439-89-6	Iron	125U	500	125	ug/L
7439-92-1	Lead	1.25U	5.00	1.25	ug/L
7439-96-5	Manganese	6.25U	25.0	6.25	ug/L
7439-98-7	**Molybdenum**	**10.9**	**5.00**	**1.25**	**ug/L**
7440-02-0	Nickel	2.50U	10.0	2.50	ug/L
7440-09-7	**Potassium**	**15300**	**500**	**125**	**ug/L**
7782-49-2	**Selenium**	**22.5**	**5.00**	**1.25**	**ug/L**
7440-22-4	Silver	1.25U	5.00	1.25	ug/L
7440-28-0	Thallium	1.25U	5.00	1.25	ug/L
7440-32-6	Titanium	1.25U	5.00	1.25	ug/L
7440-62-2	**Vanadium**	**6.20**	**5.00**	**1.25**	**ug/L**
7440-66-6	**Zinc**	**72.7J**	**100**	**25.0**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241614	**M114MW004**	Water	04/25/2014 09:25	04/26/2014 09:45

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/29/2014 09:00	531123	EPA 3005A Dissolved	500	05/05/2014 19:00	BAM	531682

CAS#	Parameter	Result	RDL	MDL	Units
7440-70-2	**Calcium**	**439000**	**250000**	**62500**	**ug/L**
7439-95-4	**Magnesium**	**311000**	**50000**	**12500**	**ug/L**
7440-23-5	**Sodium**	**2390000**	**50000**	**12500**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241614	**M114MW004**	Water	04/25/2014 09:25	04/26/2014 09:45

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/28/2014 14:30	JRM	531134

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	**Total Dissolved Solids(TDS)**	**7950**	**10.0**	**4.39**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241614	**M114MW004**	Water	04/25/2014 09:25	04/26/2014 09:45

EPA 353.2 Rev. 2

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/26/2014 13:39	DMT	531063

CAS#	Parameter	Result	RDL	MDL	Units
14797-65-0	Nitrite	0.006U	0.010	0.006	mg/L-N

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241614	**M114MW004**	Water	04/25/2014 09:25	04/26/2014 09:45

EPA 353.2 Rev. 2

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			2	04/26/2014 13:04	DMT	531064

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	**Nitrate**	**0.532**	**0.020**	**0.016**	**mg/L-N**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241614	**M114MW004**	Water	04/25/2014 09:25	04/26/2014 09:45

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			2000	04/29/2014 00:55	AEL	531163

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	**Chloride**	**3930**	**400**	**100**	**mg/L**
14808-79-8	**Sulfate**	**2040**	**400**	**100**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241614	**M114MW004**	Water	04/25/2014 09:25	04/26/2014 09:45

SM 2320 B-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/28/2014 10:10	JEM	531150

CAS#	Parameter	Result	RDL	MDL	Units
000000-00-5	**Total Alkalinity**	**64.5**	**1.0**	**0.26**	**mg/L CaCO3**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241614	**M114MW004**	Water	04/25/2014 09:25	04/26/2014 09:45

EPA 9012B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/26/2014 12:00	530925	Cyanide Prep	1	04/29/2014 16:53	AEL	531266

CAS#	Parameter	Result	RDL	MDL	Units
57-12-5	Cyanide	0.00050U	0.0050	0.00050	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241615	**MWQ-24**	Water	04/25/2014 11:00	04/26/2014 09:45

Subcontract Data

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/19/2014 09:01	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-000	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241615	**MWQ-24**	Water	04/25/2014 11:00	04/26/2014 09:45

Subcontract Data

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/19/2014 09:01	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-001	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241615	**MWQ-24**	Water	04/25/2014 11:00	04/26/2014 09:45

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2014 18:04	CLH	531830

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	1.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	0.123U	1.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	1.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	1.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	1.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.200U	1.00	0.200	ug/L
563-58-6	1,1-Dichloropropene	0.052U	1.00	0.052	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.079U	1.00	0.079	ug/L
96-18-4	1,2,3-Trichloropropane	0.065U	1.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	1.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.084U	1.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	1.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	1.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	1.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	1.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	1.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.066U	1.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	1.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	0.059U	1.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	1.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	0.170U	1.00	0.170	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	0.080U	1.00	0.080	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	0.124U	1.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	0.070U	1.00	0.070	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	1.00	0.111	ug/L
108-86-1	Bromobenzene	0.145U	1.00	0.145	ug/L
74-97-5	Bromochloromethane	0.127U	1.00	0.127	ug/L
75-27-4	Bromodichloromethane	0.083U	1.00	0.083	ug/L
75-25-2	Bromoform	0.215U	1.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	1.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	1.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	1.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	1.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	1.00	0.235	ug/L
67-66-3	Chloroform	0.155U	1.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	1.00	0.144	ug/L
74-95-3	Dibromomethane	0.211U	1.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	1.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	1.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	0.265U	1.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	1.00	0.130	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
91-20-3	Naphthalene	0.176U	1.00	0.176	ug/L
100-42-5	Styrene	0.089U	1.00	0.089	ug/L
127-18-4	Tetrachloroethene	0.193U	1.00	0.193	ug/L
108-88-3	Toluene	0.122U	1.00	0.122	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241615	**MWQ-24**	Water	04/25/2014 11:00	04/26/2014 09:45

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2014 18:04	CLH	531830

CAS#	Parameter	Result	RDL	MDL	Units
79-01-6	Trichloroethene	0.161U	1.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	1.00	0.157	ug/L
75-01-4	Vinyl chloride	0.127U	1.00	0.127	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	1.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	1.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	2.00	0.123	ug/L
104-51-8	n-Butylbenzene	0.123U	1.00	0.123	ug/L
103-65-1	n-Propylbenzene	0.727U	1.00	0.727	ug/L
95-47-6	o-Xylene	0.055U	1.00	0.055	ug/L
135-98-8	sec-Butylbenzene	0.107U	1.00	0.107	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L
98-06-6	tert-Butylbenzene	0.087U	1.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	0.077U	1.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	1.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	48.2	ug/L	96	75 - 120
1868-53-7	Dibromofluoromethane	50	49.5	ug/L	99	85 - 115
2037-26-5	Toluene d8	50	50.8	ug/L	102	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	50.9	ug/L	102	70 - 120

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241615	**MWQ-24**	Water	04/25/2014 11:00	04/26/2014 09:45

EPA 8330A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/28/2014 03:00	531047	EPA 8330A	1	04/29/2014 06:16	HCP	531158

CAS#	Parameter	Result	RDL	MDL	Units
99-35-4	1,3,5-Trinitrobenzene	0.150U	1.00	0.150	ug/L
99-65-0	1,3-Dinitrobenzene	0.150U	1.00	0.150	ug/L
118-96-7	2,4,6-Trinitrotoluene	0.270U	1.00	0.270	ug/L
121-14-2	2,4-Dinitrotoluene	0.290U	1.00	0.290	ug/L
606-20-2	2,6-Dinitrotoluene	0.260U	1.00	0.260	ug/L
355-72-78-2	2-Amino-4,6-dinitrotoluene	0.300U	1.00	0.300	ug/L
88-72-2	2-Nitrotoluene	0.170U	1.00	0.170	ug/L
99-08-1	3-Nitrotoluene	0.330U	1.00	0.330	ug/L
1946-51-0	4-Amino-2,6-dinitrotoluene	0.360U	1.00	0.360	ug/L
99-99-0	4-Nitrotoluene	0.420U	1.00	0.420	ug/L
2691-41-0	HMX	0.130U	1.00	0.130	ug/L
98-95-3	Nitrobenzene	0.230U	1.00	0.230	ug/L
55-63-0	Nitroglycerin	0.380U	1.00	0.380	ug/L
78-11-5	Pentaerythritol Tetranitrate	0.590U	1.00	0.590	ug/L
121-82-4	RDX	0.170U	1.00	0.170	ug/L
479-45-8	Tetryl	0.240U	1.00	0.240	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
528-29-0	1,2-Dinitrobenzene	2	1.35	ug/L	68	60 - 140

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241615	**MWQ-24**	Water	04/25/2014 11:00	04/26/2014 09:45

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/28/2014 11:50	531126	EPA 3010A	10	05/05/2014 20:27	BAM	531682

CAS#	Parameter	Result	RDL	MDL	Units
7439-95-4	**Magnesium**	**22500**	**1000**	**250**	**ug/L**
7440-23-5	**Sodium**	**52400**	**1000**	**250**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241615	**MWQ-24**	Water	04/25/2014 11:00	04/26/2014 09:45

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/28/2014 11:50	531126	EPA 3010A	1	05/06/2014 11:47	BAM	531759

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	**Aluminum**	**11.0J**	**20.0**	**5.00**	**ug/L**
7440-36-0	Antimony	0.50U	2.00	0.50	ug/L
7440-38-2	**Arsenic**	**3.01**	**1.00**	**0.25**	**ug/L**
7440-39-3	**Barium**	**58.2**	**1.00**	**0.25**	**ug/L**
7440-41-7	Beryllium	0.25U	1.00	0.25	ug/L
7440-43-9	Cadmium	0.25U	1.00	0.25	ug/L
7440-70-2	**Calcium**	**45600**	**500**	**125**	**ug/L**
7440-48-4	Cobalt	0.25U	1.00	0.25	ug/L
7440-50-8	Copper	0.25U	1.00	0.25	ug/L
7439-89-6	Iron	25.0U	100	25.0	ug/L
7439-92-1	Lead	0.25U	1.00	0.25	ug/L
7439-96-5	Manganese	1.25U	5.00	1.25	ug/L
7439-98-7	**Molybdenum**	**15.1**	**1.00**	**0.25**	**ug/L**
7440-02-0	Nickel	0.50U	2.00	0.50	ug/L
7440-09-7	**Potassium**	**4750**	**100**	**25.0**	**ug/L**
7782-49-2	**Selenium**	**0.95J**	**1.00**	**0.25**	**ug/L**
7440-22-4	Silver	0.25U	1.00	0.25	ug/L
7440-28-0	Thallium	0.25U	1.00	0.25	ug/L
7440-32-6	Titanium	0.25U	1.00	0.25	ug/L
7440-62-2	**Vanadium**	**20.9**	**1.00**	**0.25**	**ug/L**
7440-66-6	Zinc	5.00U	20.0	5.00	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241615	**MWQ-24**	Water	04/25/2014 11:00	04/26/2014 09:45

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/15/2014 16:30	532598	EPA 3010A	1	05/19/2014 14:14	PJS	532841

CAS#	Parameter	Result	RDL	MDL	Units
7440-47-3	**Chromium**	**0.66J**	**1.00**	**0.25**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241615	**MWQ-24**	Water	04/25/2014 11:00	04/26/2014 09:45

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/28/2014 14:30	531125	EPA 7470A Dissolved	1	05/01/2014 16:42	PJS	531465

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.070U	0.20	0.070	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241615	**MWQ-24**	Water	04/25/2014 11:00	04/26/2014 09:45

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/28/2014 14:30	531125	EPA 7470A	1	05/01/2014 16:40	PJS	531465

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.070U	0.20	0.070	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241615	**MWQ-24**	Water	04/25/2014 11:00	04/26/2014 09:45

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/29/2014 09:00	531123	EPA 3005A Dissolved	10	05/05/2014 19:49	BAM	531682

CAS#	Parameter	Result	RDL	MDL	Units
7439-95-4	**Magnesium**	**21700**	**1000**	**250**	**ug/L**
7440-23-5	**Sodium**	**49900**	**1000**	**250**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241615	**MWQ-24**	Water	04/25/2014 11:00	04/26/2014 09:45

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/29/2014 09:00	531123	EPA 3005A Dissolved	1	05/06/2014 11:37	BAM	531759

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	**Aluminum**	**9.06J**	**20.0**	**5.00**	**ug/L**
7440-36-0	Antimony	0.50U	2.00	0.50	ug/L
7440-38-2	**Arsenic**	**3.02**	**1.00**	**0.25**	**ug/L**
7440-39-3	**Barium**	**56.0**	**1.00**	**0.25**	**ug/L**
7440-41-7	Beryllium	0.25U	1.00	0.25	ug/L
7440-43-9	Cadmium	0.25U	1.00	0.25	ug/L
7440-70-2	**Calcium**	**43700**	**500**	**125**	**ug/L**
7440-47-3	**Chromium**	**0.62J**	**1.00**	**0.25**	**ug/L**
7440-48-4	Cobalt	0.25U	1.00	0.25	ug/L
7440-50-8	**Copper**	**0.28J**	**1.00**	**0.25**	**ug/L**
7439-89-6	Iron	25.0U	100	25.0	ug/L
7439-92-1	Lead	0.25U	1.00	0.25	ug/L
7439-96-5	Manganese	1.25U	5.00	1.25	ug/L
7439-98-7	**Molybdenum**	**14.0**	**1.00**	**0.25**	**ug/L**
7440-02-0	Nickel	0.50U	2.00	0.50	ug/L
7440-09-7	**Potassium**	**4610**	**100**	**25.0**	**ug/L**
7782-49-2	**Selenium**	**0.80J**	**1.00**	**0.25**	**ug/L**
7440-22-4	Silver	0.25U	1.00	0.25	ug/L
7440-28-0	Thallium	0.25U	1.00	0.25	ug/L
7440-32-6	Titanium	0.25U	1.00	0.25	ug/L
7440-62-2	**Vanadium**	**19.7**	**1.00**	**0.25**	**ug/L**
7440-66-6	Zinc	5.00U	20.0	5.00	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241615	**MWQ-24**	Water	04/25/2014 11:00	04/26/2014 09:45

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/28/2014 14:30	JRM	531134

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	**Total Dissolved Solids(TDS)**	**270**	**10.0**	**4.39**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241615	**MWQ-24**	Water	04/25/2014 11:00	04/26/2014 09:45

EPA 353.2 Rev. 2

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/26/2014 13:43	DMT	531063

CAS#	Parameter	Result	RDL	MDL	Units
14797-65-0	Nitrite	0.006U	0.010	0.006	mg/L-N

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241615	**MWQ-24**	Water	04/25/2014 11:00	04/26/2014 09:45

EPA 353.2 Rev. 2

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			5	04/26/2014 13:10	DMT	531064

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	**Nitrate**	**1.88**	**0.050**	**0.041**	**mg/L-N**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241615	**MWQ-24**	Water	04/25/2014 11:00	04/26/2014 09:45

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	04/29/2014 01:13	AEL	531163

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	**Chloride**	**5.87**	**2.00**	**0.500**	**mg/L**
14808-79-8	**Sulfate**	**62.1**	**2.00**	**0.500**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241615	**MWQ-24**	Water	04/25/2014 11:00	04/26/2014 09:45

SM 2320 B-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/28/2014 10:10	JEM	531150

CAS#	Parameter	Result	RDL	MDL	Units
000000-00-5	**Total Alkalinity**	**218**	**1.0**	**0.26**	**mg/L CaCO3**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241615	**MWQ-24**	Water	04/25/2014 11:00	04/26/2014 09:45

EPA 9012B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/26/2014 12:00	530925	Cyanide Prep	1	04/29/2014 16:56	AEL	531266

CAS#	Parameter	Result	RDL	MDL	Units
57-12-5	Cyanide	0.00050U	0.0050	0.00050	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241616	**TB-6**	Water	04/25/2014 09:25	04/26/2014 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2014 18:25	CLH	531830

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	1.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	0.123U	1.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	1.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	1.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	1.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.200U	1.00	0.200	ug/L
563-58-6	1,1-Dichloropropene	0.052U	1.00	0.052	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.079U	1.00	0.079	ug/L
96-18-4	1,2,3-Trichloropropane	0.065U	1.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	1.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.084U	1.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	1.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	1.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	1.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	1.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	1.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.066U	1.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	1.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	0.059U	1.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	1.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	0.170U	1.00	0.170	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	0.080U	1.00	0.080	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	0.124U	1.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	0.070U	1.00	0.070	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	1.00	0.111	ug/L
108-86-1	Bromobenzene	0.145U	1.00	0.145	ug/L
74-97-5	Bromochloromethane	0.127U	1.00	0.127	ug/L
75-27-4	Bromodichloromethane	0.083U	1.00	0.083	ug/L
75-25-2	Bromoform	0.215U	1.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	1.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	1.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	1.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	1.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	1.00	0.235	ug/L
67-66-3	Chloroform	0.155U	1.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	1.00	0.144	ug/L
74-95-3	Dibromomethane	0.211U	1.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	1.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	1.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	0.265U	1.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	1.00	0.130	ug/L
75-09-2	**Methylene chloride**	**1.38J**	**5.00**	**0.149**	**ug/L**
91-20-3	Naphthalene	0.176U	1.00	0.176	ug/L
100-42-5	Styrene	0.089U	1.00	0.089	ug/L
127-18-4	Tetrachloroethene	0.193U	1.00	0.193	ug/L
108-88-3	Toluene	0.122U	1.00	0.122	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241616	**TB-6**	Water	04/25/2014 09:25	04/26/2014 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2014 18:25	CLH	531830

CAS#	Parameter	Result	RDL	MDL	Units
79-01-6	Trichloroethene	0.161U	1.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	1.00	0.157	ug/L
75-01-4	Vinyl chloride	0.127U	1.00	0.127	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	1.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	1.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	2.00	0.123	ug/L
104-51-8	n-Butylbenzene	0.123U	1.00	0.123	ug/L
103-65-1	n-Propylbenzene	0.727U	1.00	0.727	ug/L
95-47-6	o-Xylene	0.055U	1.00	0.055	ug/L
135-98-8	sec-Butylbenzene	0.107U	1.00	0.107	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L
98-06-6	tert-Butylbenzene	0.087U	1.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	0.077U	1.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	1.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	48.5	ug/L	97	75 - 120
1868-53-7	Dibromofluoromethane	50	50.4	ug/L	101	85 - 115
2037-26-5	Toluene d8	50	51.5	ug/L	103	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	51.8	ug/L	104	70 - 120

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241617	**MA02MW001D**	Water	04/25/2014 12:52	04/26/2014 09:45

Subcontract Data

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/19/2014 09:01	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-000	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241617	**MA02MW001D**	Water	04/25/2014 12:52	04/26/2014 09:45

Subcontract Data

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/19/2014 09:01	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-001	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241617	**MA02MW001D**	Water	04/25/2014 12:52	04/26/2014 09:45

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2014 18:45	CLH	531830

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	1.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	0.123U	1.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	1.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	1.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	1.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.200U	1.00	0.200	ug/L
563-58-6	1,1-Dichloropropene	0.052U	1.00	0.052	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.079U	1.00	0.079	ug/L
96-18-4	1,2,3-Trichloropropane	0.065U	1.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	1.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.084U	1.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	1.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	1.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	1.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	1.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	1.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.066U	1.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	1.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	0.059U	1.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	1.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	0.170U	1.00	0.170	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	0.080U	1.00	0.080	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	0.124U	1.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	0.070U	1.00	0.070	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	1.00	0.111	ug/L
108-86-1	Bromobenzene	0.145U	1.00	0.145	ug/L
74-97-5	Bromochloromethane	0.127U	1.00	0.127	ug/L
75-27-4	Bromodichloromethane	0.083U	1.00	0.083	ug/L
75-25-2	Bromoform	0.215U	1.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	1.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	1.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	1.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	1.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	1.00	0.235	ug/L
67-66-3	Chloroform	0.155U	1.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	1.00	0.144	ug/L
74-95-3	Dibromomethane	0.211U	1.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	1.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	1.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	0.265U	1.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	1.00	0.130	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
91-20-3	Naphthalene	0.176U	1.00	0.176	ug/L
100-42-5	Styrene	0.089U	1.00	0.089	ug/L
127-18-4	Tetrachloroethene	0.193U	1.00	0.193	ug/L
108-88-3	Toluene	0.122U	1.00	0.122	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241617	**MA02MW001D**	Water	04/25/2014 12:52	04/26/2014 09:45

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2014 18:45	CLH	531830

CAS#	Parameter	Result	RDL	MDL	Units
79-01-6	Trichloroethene	0.161U	1.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	1.00	0.157	ug/L
75-01-4	**Vinyl chloride**	**0.606J**	**1.00**	**0.127**	**ug/L**
156-59-2	cis-1,2-Dichloroethene	0.103U	1.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	1.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	2.00	0.123	ug/L
104-51-8	n-Butylbenzene	0.123U	1.00	0.123	ug/L
103-65-1	n-Propylbenzene	0.727U	1.00	0.727	ug/L
95-47-6	o-Xylene	0.055U	1.00	0.055	ug/L
135-98-8	sec-Butylbenzene	0.107U	1.00	0.107	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L
98-06-6	tert-Butylbenzene	0.087U	1.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	0.077U	1.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	1.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	48.3	ug/L	97	75 - 120
1868-53-7	Dibromofluoromethane	50	50.4	ug/L	101	85 - 115
2037-26-5	Toluene d8	50	51.5	ug/L	103	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	51.6	ug/L	103	70 - 120

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241617	**MA02MW001D**	Water	04/25/2014 12:52	04/26/2014 09:45

EPA 8330A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/28/2014 03:00	531047	EPA 8330A	1	04/29/2014 07:20	HCP	531158

CAS#	Parameter	Result	RDL	MDL	Units
99-35-4	1,3,5-Trinitrobenzene	0.150U	1.00	0.150	ug/L
99-65-0	1,3-Dinitrobenzene	0.150U	1.00	0.150	ug/L
118-96-7	2,4,6-Trinitrotoluene	0.270U	1.00	0.270	ug/L
121-14-2	2,4-Dinitrotoluene	0.290U	1.00	0.290	ug/L
606-20-2	2,6-Dinitrotoluene	0.260U	1.00	0.260	ug/L
355-72-78-2	2-Amino-4,6-dinitrotoluene	0.300U	1.00	0.300	ug/L
88-72-2	2-Nitrotoluene	0.170U	1.00	0.170	ug/L
99-08-1	3-Nitrotoluene	0.330U	1.00	0.330	ug/L
1946-51-0	4-Amino-2,6-dinitrotoluene	0.360U	1.00	0.360	ug/L
99-99-0	4-Nitrotoluene	0.420U	1.00	0.420	ug/L
2691-41-0	HMX	0.130U	1.00	0.130	ug/L
98-95-3	Nitrobenzene	0.230U	1.00	0.230	ug/L
55-63-0	Nitroglycerin	0.380U	1.00	0.380	ug/L
78-11-5	Pentaerythritol Tetranitrate	0.590U	1.00	0.590	ug/L
121-82-4	RDX	0.170U	1.00	0.170	ug/L
479-45-8	Tetryl	0.240U	1.00	0.240	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
528-29-0	1,2-Dinitrobenzene	2	1.44	ug/L	72	60 - 140

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241617	**MA02MW001D**	Water	04/25/2014 12:52	04/26/2014 09:45

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/28/2014 11:50	531126	EPA 3010A	5	05/03/2014 10:11	AWG	531679

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	25.0U	100	25.0	ug/L
7440-36-0	Antimony	2.50U	10.0	2.50	ug/L
7440-38-2	Arsenic	1.25U	5.00	1.25	ug/L
7440-39-3	**Barium**	**10.2**	**5.00**	**1.25**	**ug/L**
7440-41-7	Beryllium	1.25U	5.00	1.25	ug/L
7440-43-9	Cadmium	1.25U	5.00	1.25	ug/L
7440-70-2	**Calcium**	**153000**	**2500**	**625**	**ug/L**
7440-47-3	Chromium	1.25U	5.00	1.25	ug/L
7440-48-4	Cobalt	1.25U	5.00	1.25	ug/L
7440-50-8	**Copper**	**1.64J**	**5.00**	**1.25**	**ug/L**
7439-89-6	Iron	125U	500	125	ug/L
7439-92-1	Lead	1.25U	5.00	1.25	ug/L
7439-96-5	**Manganese**	**191**	**25.0**	**6.25**	**ug/L**
7439-98-7	**Molybdenum**	**20.2**	**5.00**	**1.25**	**ug/L**
7440-02-0	Nickel	2.50U	10.0	2.50	ug/L
7440-09-7	**Potassium**	**7650**	**500**	**125**	**ug/L**
7782-49-2	**Selenium**	**36.5**	**5.00**	**1.25**	**ug/L**
7440-22-4	Silver	1.25U	5.00	1.25	ug/L
7440-28-0	Thallium	1.25U	5.00	1.25	ug/L
7440-32-6	Titanium	1.25U	5.00	1.25	ug/L
7440-62-2	**Vanadium**	**5.34**	**5.00**	**1.25**	**ug/L**
7440-66-6	Zinc	25.0U	100	25.0	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241617	**MA02MW001D**	Water	04/25/2014 12:52	04/26/2014 09:45

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/28/2014 11:50	531126	EPA 3010A	500	05/05/2014 20:08	BAM	531682

CAS#	Parameter	Result	RDL	MDL	Units
7439-95-4	**Magnesium**	**65400**	**50000**	**12500**	**ug/L**
7440-23-5	**Sodium**	**2350000**	**50000**	**12500**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241617	**MA02MW001D**	Water	04/25/2014 12:52	04/26/2014 09:45

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/28/2014 14:30	531125	EPA 7470A Dissolved	1	05/01/2014 16:45	PJS	531465

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.070U	0.20	0.070	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241617	**MA02MW001D**	Water	04/25/2014 12:52	04/26/2014 09:45

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/28/2014 14:30	531125	EPA 7470A	1	05/01/2014 16:44	PJS	531465

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.070U	0.20	0.070	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241617	**MA02MW001D**	Water	04/25/2014 12:52	04/26/2014 09:45

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/29/2014 09:00	531123	EPA 3005A Dissolved	5	05/03/2014 14:51	AWG	531679

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	25.0U	100	25.0	ug/L
7440-36-0	Antimony	2.50U	10.0	2.50	ug/L
7440-38-2	Arsenic	1.25U	5.00	1.25	ug/L
7440-39-3	**Barium**	**9.89**	**5.00**	**1.25**	**ug/L**
7440-41-7	Beryllium	1.25U	5.00	1.25	ug/L
7440-43-9	Cadmium	1.25U	5.00	1.25	ug/L
7440-70-2	**Calcium**	**133000**	**2500**	**625**	**ug/L**
7440-47-3	Chromium	1.25U	5.00	1.25	ug/L
7440-48-4	Cobalt	1.25U	5.00	1.25	ug/L
7440-50-8	**Copper**	**1.99J**	**5.00**	**1.25**	**ug/L**
7439-89-6	Iron	125U	500	125	ug/L
7439-92-1	Lead	1.25U	5.00	1.25	ug/L
7439-96-5	**Manganese**	**177**	**25.0**	**6.25**	**ug/L**
7439-98-7	**Molybdenum**	**18.5**	**5.00**	**1.25**	**ug/L**
7440-02-0	Nickel	2.50U	10.0	2.50	ug/L
7440-09-7	**Potassium**	**6900**	**500**	**125**	**ug/L**
7782-49-2	**Selenium**	**35.9**	**5.00**	**1.25**	**ug/L**
7440-22-4	Silver	1.25U	5.00	1.25	ug/L
7440-28-0	Thallium	1.25U	5.00	1.25	ug/L
7440-32-6	Titanium	1.25U	5.00	1.25	ug/L
7440-62-2	**Vanadium**	**4.38J**	**5.00**	**1.25**	**ug/L**
7440-66-6	Zinc	25.0U	100	25.0	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241617	**MA02MW001D**	Water	04/25/2014 12:52	04/26/2014 09:45

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/29/2014 09:00	531123	EPA 3005A Dissolved	500	05/05/2014 19:39	BAM	531682

CAS#	Parameter	Result	RDL	MDL	Units
7439-95-4	**Magnesium**	**57200**	**50000**	**12500**	**ug/L**
7440-23-5	**Sodium**	**2060000**	**50000**	**12500**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241617	**MA02MW001D**	Water	04/25/2014 12:52	04/26/2014 09:45

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/28/2014 14:30	JRM	531134

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	**Total Dissolved Solids(TDS)**	**5730**	**10.0**	**4.39**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241617	**MA02MW001D**	Water	04/25/2014 12:52	04/26/2014 09:45

EPA 353.2 Rev. 2

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/26/2014 13:44	DMT	531063

CAS#	Parameter	Result	RDL	MDL	Units
14797-65-0	Nitrite	0.006U	0.010	0.006	mg/L-N

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241617	**MA02MW001D**	Water	04/25/2014 12:52	04/26/2014 09:45

EPA 353.2 Rev. 2

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			5	04/26/2014 13:11	DMT	531064

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	**Nitrate**	**2.24**	**0.050**	**0.041**	**mg/L-N**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241617	**MA02MW001D**	Water	04/25/2014 12:52	04/26/2014 09:45

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1000	04/29/2014 01:30	AEL	531163

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	**Chloride**	**2190**	**200**	**50.0**	**mg/L**
14808-79-8	**Sulfate**	**2070**	**200**	**50.0**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241617	**MA02MW001D**	Water	04/25/2014 12:52	04/26/2014 09:45

SM 2320 B-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/28/2014 10:10	JEM	531150

CAS#	Parameter	Result	RDL	MDL	Units
000000-00-5	**Total Alkalinity**	**128**	**1.0**	**0.26**	**mg/L CaCO3**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241617	**MA02MW001D**	Water	04/25/2014 12:52	04/26/2014 09:45

EPA 9012B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/26/2014 12:00	530925	Cyanide Prep	1	04/29/2014 16:57	AEL	531266

CAS#	Parameter	Result	RDL	MDL	Units
57-12-5	Cyanide	0.00050U	0.0050	0.00050	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241618	**MA02MW001D-a**	Water	04/25/2014 12:52	04/26/2014 09:45

Subcontract Data

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/19/2014 09:02	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-000	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241618	**MA02MW001D-a**	Water	04/25/2014 12:52	04/26/2014 09:45

Subcontract Data

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/19/2014 09:02	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-001	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241618	**MA02MW001D-a**	Water	04/25/2014 12:52	04/26/2014 09:45

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2014 19:06	CLH	531830

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	1.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	0.123U	1.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	1.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	1.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	1.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.200U	1.00	0.200	ug/L
563-58-6	1,1-Dichloropropene	0.052U	1.00	0.052	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.079U	1.00	0.079	ug/L
96-18-4	1,2,3-Trichloropropane	0.065U	1.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	1.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.084U	1.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	1.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	1.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	1.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	1.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	1.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.066U	1.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	1.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	0.059U	1.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	1.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	0.170U	1.00	0.170	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	0.080U	1.00	0.080	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	0.124U	1.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	0.070U	1.00	0.070	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	1.00	0.111	ug/L
108-86-1	Bromobenzene	0.145U	1.00	0.145	ug/L
74-97-5	Bromochloromethane	0.127U	1.00	0.127	ug/L
75-27-4	Bromodichloromethane	0.083U	1.00	0.083	ug/L
75-25-2	Bromoform	0.215U	1.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	1.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	1.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	1.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	1.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	1.00	0.235	ug/L
67-66-3	Chloroform	0.155U	1.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	1.00	0.144	ug/L
74-95-3	Dibromomethane	0.211U	1.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	1.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	1.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	0.265U	1.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	1.00	0.130	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
91-20-3	Naphthalene	0.176U	1.00	0.176	ug/L
100-42-5	Styrene	0.089U	1.00	0.089	ug/L
127-18-4	Tetrachloroethene	0.193U	1.00	0.193	ug/L
108-88-3	Toluene	0.122U	1.00	0.122	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241618	**MA02MW001D-a**	Water	04/25/2014 12:52	04/26/2014 09:45

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2014 19:06	CLH	531830

CAS#	Parameter	Result	RDL	MDL	Units
79-01-6	Trichloroethene	0.161U	1.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	1.00	0.157	ug/L
75-01-4	**Vinyl chloride**	**0.548J**	**1.00**	**0.127**	**ug/L**
156-59-2	cis-1,2-Dichloroethene	0.103U	1.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	1.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	2.00	0.123	ug/L
104-51-8	n-Butylbenzene	0.123U	1.00	0.123	ug/L
103-65-1	n-Propylbenzene	0.727U	1.00	0.727	ug/L
95-47-6	o-Xylene	0.055U	1.00	0.055	ug/L
135-98-8	sec-Butylbenzene	0.107U	1.00	0.107	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L
98-06-6	tert-Butylbenzene	0.087U	1.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	0.077U	1.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	1.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	49.1	ug/L	98	75 - 120
1868-53-7	Dibromofluoromethane	50	50.8	ug/L	102	85 - 115
2037-26-5	Toluene d8	50	51.3	ug/L	103	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	50.3	ug/L	101	70 - 120

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241618	**MA02MW001D-a**	Water	04/25/2014 12:52	04/26/2014 09:45

EPA 8330A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/28/2014 03:00	531047	EPA 8330A	1	04/29/2014 08:24	HCP	531158

CAS#	Parameter	Result	RDL	MDL	Units
99-35-4	1,3,5-Trinitrobenzene	0.150U	1.00	0.150	ug/L
99-65-0	1,3-Dinitrobenzene	0.150U	1.00	0.150	ug/L
118-96-7	2,4,6-Trinitrotoluene	0.270U	1.00	0.270	ug/L
121-14-2	2,4-Dinitrotoluene	0.290U	1.00	0.290	ug/L
606-20-2	2,6-Dinitrotoluene	0.260U	1.00	0.260	ug/L
355-72-78-2	2-Amino-4,6-dinitrotoluene	0.300U	1.00	0.300	ug/L
88-72-2	2-Nitrotoluene	0.170U	1.00	0.170	ug/L
99-08-1	3-Nitrotoluene	0.330U	1.00	0.330	ug/L
1946-51-0	4-Amino-2,6-dinitrotoluene	0.360U	1.00	0.360	ug/L
99-99-0	4-Nitrotoluene	0.420U	1.00	0.420	ug/L
2691-41-0	HMX	0.130U	1.00	0.130	ug/L
98-95-3	Nitrobenzene	0.230U	1.00	0.230	ug/L
55-63-0	Nitroglycerin	0.380U	1.00	0.380	ug/L
78-11-5	Pentaerythritol Tetranitrate	0.590U	1.00	0.590	ug/L
121-82-4	RDX	0.170U	1.00	0.170	ug/L
479-45-8	Tetryl	0.240U	1.00	0.240	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
528-29-0	1,2-Dinitrobenzene	2	1.37	ug/L	69	60 - 140

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241618	**MA02MW001D-a**	Water	04/25/2014 12:52	04/26/2014 09:45

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/28/2014 11:50	531126	EPA 3010A	5	05/03/2014 10:21	AWG	531679

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	25.0U	100	25.0	ug/L
7440-36-0	Antimony	2.50U	10.0	2.50	ug/L
7440-38-2	Arsenic	1.25U	5.00	1.25	ug/L
7440-39-3	**Barium**	**10.0**	**5.00**	**1.25**	**ug/L**
7440-41-7	Beryllium	1.25U	5.00	1.25	ug/L
7440-43-9	Cadmium	1.25U	5.00	1.25	ug/L
7440-70-2	**Calcium**	**138000**	**2500**	**625**	**ug/L**
7440-47-3	Chromium	1.25U	5.00	1.25	ug/L
7440-48-4	Cobalt	1.25U	5.00	1.25	ug/L
7440-50-8	**Copper**	**2.31J**	**5.00**	**1.25**	**ug/L**
7439-89-6	Iron	125U	500	125	ug/L
7439-92-1	Lead	1.25U	5.00	1.25	ug/L
7439-96-5	**Manganese**	**181**	**25.0**	**6.25**	**ug/L**
7439-98-7	**Molybdenum**	**19.3**	**5.00**	**1.25**	**ug/L**
7440-02-0	Nickel	2.50U	10.0	2.50	ug/L
7440-09-7	**Potassium**	**7160**	**500**	**125**	**ug/L**
7782-49-2	**Selenium**	**35.5**	**5.00**	**1.25**	**ug/L**
7440-22-4	Silver	1.25U	5.00	1.25	ug/L
7440-28-0	Thallium	1.25U	5.00	1.25	ug/L
7440-32-6	Titanium	1.25U	5.00	1.25	ug/L
7440-62-2	**Vanadium**	**4.59J**	**5.00**	**1.25**	**ug/L**
7440-66-6	Zinc	25.0U	100	25.0	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241618	**MA02MW001D-a**	Water	04/25/2014 12:52	04/26/2014 09:45

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/28/2014 11:50	531126	EPA 3010A	500	05/05/2014 20:18	BAM	531682

CAS#	Parameter	Result	RDL	MDL	Units
7439-95-4	**Magnesium**	**60300**	**50000**	**12500**	**ug/L**
7440-23-5	**Sodium**	**2160000**	**50000**	**12500**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241618	**MA02MW001D-a**	Water	04/25/2014 12:52	04/26/2014 09:45

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/28/2014 14:30	531125	EPA 7470A Dissolved	1	05/01/2014 16:49	PJS	531465

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.070U	0.20	0.070	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241618	**MA02MW001D-a**	Water	04/25/2014 12:52	04/26/2014 09:45

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/28/2014 14:30	531125	EPA 7470A	1	05/01/2014 16:47	PJS	531465

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.070U	0.20	0.070	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241618	**MA02MW001D-a**	Water	04/25/2014 12:52	04/26/2014 09:45

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/29/2014 09:00	531123	EPA 3005A Dissolved	5	05/03/2014 15:01	AWG	531679

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	25.0U	100	25.0	ug/L
7440-36-0	Antimony	2.50U	10.0	2.50	ug/L
7440-38-2	**Arsenic**	**1.26J**	**5.00**	**1.25**	**ug/L**
7440-39-3	**Barium**	**9.51**	**5.00**	**1.25**	**ug/L**
7440-41-7	Beryllium	1.25U	5.00	1.25	ug/L
7440-43-9	Cadmium	1.25U	5.00	1.25	ug/L
7440-70-2	**Calcium**	**133000**	**2500**	**625**	**ug/L**
7440-47-3	Chromium	1.25U	5.00	1.25	ug/L
7440-48-4	Cobalt	1.25U	5.00	1.25	ug/L
7440-50-8	**Copper**	**1.88J**	**5.00**	**1.25**	**ug/L**
7439-89-6	Iron	125U	500	125	ug/L
7439-92-1	Lead	1.25U	5.00	1.25	ug/L
7439-96-5	**Manganese**	**176**	**25.0**	**6.25**	**ug/L**
7439-98-7	**Molybdenum**	**18.9**	**5.00**	**1.25**	**ug/L**
7440-02-0	Nickel	2.50U	10.0	2.50	ug/L
7440-09-7	**Potassium**	**6970**	**500**	**125**	**ug/L**
7782-49-2	**Selenium**	**36.4**	**5.00**	**1.25**	**ug/L**
7440-22-4	Silver	1.25U	5.00	1.25	ug/L
7440-28-0	Thallium	1.25U	5.00	1.25	ug/L
7440-32-6	Titanium	1.25U	5.00	1.25	ug/L
7440-62-2	**Vanadium**	**4.37J**	**5.00**	**1.25**	**ug/L**
7440-66-6	Zinc	25.0U	100	25.0	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241618	**MA02MW001D-a**	Water	04/25/2014 12:52	04/26/2014 09:45

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/29/2014 09:00	531123	EPA 3005A Dissolved	500	05/06/2014 10:59	BAM	531759

CAS#	Parameter	Result	RDL	MDL	Units
7439-95-4	**Magnesium**	**57800**	**50000**	**12500**	**ug/L**
7440-23-5	**Sodium**	**2090000**	**50000**	**12500**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241618	**MA02MW001D-a**	Water	04/25/2014 12:52	04/26/2014 09:45

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/28/2014 14:30	JRM	531134

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	**Total Dissolved Solids(TDS)**	**5960**	**10.0**	**4.39**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241618	**MA02MW001D-a**	Water	04/25/2014 12:52	04/26/2014 09:45

EPA 353.2 Rev. 2

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/26/2014 13:45	DMT	531063

CAS#	Parameter	Result	RDL	MDL	Units
14797-65-0	Nitrite	0.006U	0.010	0.006	mg/L-N

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241618	**MA02MW001D-a**	Water	04/25/2014 12:52	04/26/2014 09:45

EPA 353.2 Rev. 2

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			5	04/26/2014 13:12	DMT	531064

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	**Nitrate**	**2.85**	**0.050**	**0.041**	**mg/L-N**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241618	**MA02MW001D-a**	Water	04/25/2014 12:52	04/26/2014 09:45

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1000	04/29/2014 01:48	AEL	531163

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	**Chloride**	**2110**	**200**	**50.0**	**mg/L**
14808-79-8	**Sulfate**	**2070**	**200**	**50.0**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241618	**MA02MW001D-a**	Water	04/25/2014 12:52	04/26/2014 09:45

SM 2320 B-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/28/2014 10:10	JEM	531150

CAS#	Parameter	Result	RDL	MDL	Units
000000-00-5	**Total Alkalinity**	**134**	**1.0**	**0.26**	**mg/L CaCO3**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241618	**MA02MW001D-a**	Water	04/25/2014 12:52	04/26/2014 09:45

EPA 9012B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/26/2014 12:00	530925	Cyanide Prep	1	04/29/2014 16:58	AEL	531266

CAS#	Parameter	Result	RDL	MDL	Units
57-12-5	Cyanide	0.00050U	0.0050	0.00050	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241619	**TB-7**	Water	04/25/2014 12:52	04/26/2014 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/08/2014 19:33	ALC	532018

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	1.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	0.123U	1.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	1.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	1.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	1.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.200U	1.00	0.200	ug/L
563-58-6	1,1-Dichloropropene	0.052U	1.00	0.052	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.079U	1.00	0.079	ug/L
96-18-4	1,2,3-Trichloropropane	0.065U	1.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	1.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.084U	1.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	1.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	1.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	1.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	1.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.150U	1.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.066U	1.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	1.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	0.059U	1.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	1.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	0.170U	1.00	0.170	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	0.080U	1.00	0.080	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	0.124U	1.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	0.070U	1.00	0.070	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	Acetone	0.193U	5.00	0.193	ug/L
71-43-2	Benzene	0.111U	1.00	0.111	ug/L
108-86-1	Bromobenzene	0.145U	1.00	0.145	ug/L
74-97-5	Bromochloromethane	0.127U	1.00	0.127	ug/L
75-27-4	Bromodichloromethane	0.083U	1.00	0.083	ug/L
75-25-2	Bromoform	0.215U	1.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	1.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	1.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	1.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	1.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	1.00	0.235	ug/L
67-66-3	Chloroform	0.155U	1.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	1.00	0.144	ug/L
74-95-3	Dibromomethane	0.211U	1.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	1.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	1.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	0.265U	1.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	1.00	0.130	ug/L
75-09-2	**Methylene chloride**	**1.37J**	**5.00**	**0.149**	**ug/L**
91-20-3	Naphthalene	0.176U	1.00	0.176	ug/L
100-42-5	Styrene	0.089U	1.00	0.089	ug/L
127-18-4	Tetrachloroethene	0.193U	1.00	0.193	ug/L
108-88-3	Toluene	0.122U	1.00	0.122	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404241619	**TB-7**	Water	04/25/2014 12:52	04/26/2014 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/08/2014 19:33	ALC	532018

CAS#	Parameter	Result	RDL	MDL	Units
79-01-6	Trichloroethene	0.161U	1.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	1.00	0.157	ug/L
75-01-4	Vinyl chloride	0.127U	1.00	0.127	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	1.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	1.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	2.00	0.123	ug/L
104-51-8	n-Butylbenzene	0.123U	1.00	0.123	ug/L
103-65-1	n-Propylbenzene	0.727U	1.00	0.727	ug/L
95-47-6	o-Xylene	0.055U	1.00	0.055	ug/L
135-98-8	sec-Butylbenzene	0.107U	1.00	0.107	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	5.00	0.078	ug/L
98-06-6	tert-Butylbenzene	0.087U	1.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	0.077U	1.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	1.00	0.128	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	47.2	ug/L	94	75 - 120
1868-53-7	Dibromofluoromethane	50	52.2	ug/L	104	85 - 115
2037-26-5	Toluene d8	50	45.7	ug/L	91	85 - 120
17060-07-0	1,2-Dichloroethane-d4	50	56.6	ug/L	113	70 - 120

GC/MS Volatiles Quality Control Summary

Analytical Batch 531663	**Client ID**	MB531663	LCS531663	LCSD531663
Prep Batch N/A	**GCAL ID**	1312343	1312344	1312345
	Sample Type	Method Blank	LCS	LCSD
	Analytical Date	05/05/2014 00:03	05/04/2014 22:09	05/04/2014 22:32
	Matrix	Water	Water	Water

EPA 8260B		**Units**	ug/L	**Spike**			**Control**				**RPD**
		Result	**RDL**	**Added**	**Result**	**% R**	**Limits % R**	**Result**	**% R**	**RPD**	**Limit**
67-64-1	Acetone	0.193U	0.193	50.0	67.6	135	40 - 140	64.2	128	5	30
74-97-5	Bromochloromethane	0.127U	0.127	50.0	49.5	99	65 - 130	49.0	98	1	30
75-27-4	Bromodichloromethane	0.083U	0.083	50.0	49.3	99	75 - 120	48.4	97	2	30
75-25-2	Bromoform	0.215U	0.215	50.0	52.4	105	70 - 130	51.9	104	1	30
74-83-9	Bromomethane	0.427U	0.427	50.0	56.6	113	30 - 145	57.7	115	2	30
75-15-0	Carbon disulfide	0.190U	0.190	50.0	50.7	101	35 - 160	51.0	102	1	30
56-23-5	Carbon tetrachloride	0.248U	0.248	50.0	47.6	95	65 - 140	47.6	95	0	30
75-00-3	Chloroethane	0.235U	0.235	50.0	52.6	105	60 - 135	53.2	106	1	30
136777-61-2	m,p-Xylene	0.123U	0.123	100	102	102	75 - 130	105	105	3	30
67-66-3	Chloroform	0.155U	0.155	50.0	47.2	94	65 - 135	46.5	93	1	30
74-87-3	Chloromethane	0.144U	0.144	50.0	57.7	115	40 - 125	58.0	116	1	30
74-95-3	Dibromomethane	0.211U	0.211	50.0	49.3	99	75 - 125	47.8	96	3	30
75-71-8	Dichlorodifluoromethane	0.145U	0.145	50.0	59.9	120	30 - 155	59.9	120	0	30
75-34-3	1,1-Dichloroethane	0.171U	0.171	50.0	48.4	97	70 - 135	48.3	97	0	30
107-06-2	1,2-Dichloroethane	0.116U	0.116	50.0	49.0	98	70 - 130	48.0	96	2	30
156-59-2	cis-1,2-Dichloroethene	0.103U	0.103	50.0	50.4	101	70 - 125	50.6	101	0	30
156-60-5	trans-1,2-Dichloroethene	0.077U	0.077	50.0	49.4	99	60 - 140	50.3	101	2	30
75-09-2	Methylene chloride	0.149U	0.149	50.0	54.0	108	55 - 140	53.1	106	2	30
78-87-5	1,2-Dichloropropane	0.150U	0.150	50.0	47.5	95	75 - 125	47.6	95	0	30
10061-01-5	cis-1,3-Dichloropropene	0.124U	0.124	50.0	54.5	109	70 - 130	54.0	108	1	30
10061-02-6	trans-1,3-Dichloropropene	0.128U	0.128	50.0	51.9	104	55 - 140	52.1	104	0	30
100-41-4	Ethylbenzene	0.109U	0.109	50.0	48.1	96	75 - 125	48.9	98	2	30
591-78-6	2-Hexanone	0.122U	0.122	50.0	55.1	110	55 - 130	53.0	106	4	30
98-82-8	Isopropylbenzene (Cumene)	0.130U	0.130	50.0	51.3	103	75 - 125	51.9	104	1	30
78-93-3	2-Butanone	0.142U	0.142	50.0	55.7	111	30 - 150	52.2	104	6	30
108-10-1	4-Methyl-2-pentanone	0.120U	0.120	50.0	53.2	106	60 - 135	52.0	104	2	30
103-65-1	n-Propylbenzene	0.727U	0.727	50.0	50.0	100	70 - 130	51.4	103	3	30
100-42-5	Styrene	0.089U	0.089	50.0	51.8	104	65 - 135	52.2	104	1	30
127-18-4	Tetrachloroethene	0.193U	0.193	50.0	47.6	95	45 - 150	49.4	99	4	30
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	0.120	50.0	47.7	95	80 - 130	48.6	97	2	30
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	0.109	50.0	50.7	101	65 - 130	50.2	100	1	30
120-82-1	1,2,4-Trichlorobenzene	0.105U	0.105	50.0	56.9	114	65 - 135	57.8	116	2	30
71-55-6	1,1,1-Trichloroethane	0.123U	0.123	50.0	46.8	94	65 - 130	46.8	94	0	30

GC/MS Volatiles Quality Control Summary

Analytical Batch 531663	**Client ID**	MB531663	LCS531663	LCSD531663
Prep Batch N/A	**GCAL ID**	1312343	1312344	1312345
	Sample Type	Method Blank	LCS	LCSD
	Analytical Date	05/05/2014 00:03	05/04/2014 22:09	05/04/2014 22:32
	Matrix	Water	Water	Water

EPA 8260B		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
79-00-5	1,1,2-Trichloroethane	0.159U	0.159	50.0	48.2	96	75 - 125	48.1	96	0	30
75-69-4	Trichlorofluoromethane	0.157U	0.157	50.0	50.9	102	60 - 145	50.8	102	0	30
96-18-4	1,2,3-Trichloropropane	0.065U	0.065	50.0	50.8	102	75 - 125	50.7	101	0	30
95-63-6	1,2,4-Trimethylbenzene	0.084U	0.084	50.0	51.8	104	75 - 130	52.8	106	2	30
108-67-8	1,3,5-Trimethylbenzene	0.066U	0.066	50.0	55.1	110	75 - 130	56.4	113	2	30
75-01-4	Vinyl chloride	0.127U	0.127	50.0	52.1	104	50 - 145	52.4	105	1	30
95-47-6	o-Xylene	0.055U	0.055	50.0	50.5	101	80 - 120	51.1	102	1	30
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	0.194	50.0	54.3	109	50 - 130	51.6	103	5	30
106-93-4	1,2-Dibromoethane	0.102U	0.102	50.0	51.5	103	80 - 120	50.7	101	2	30
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	0.078	50.0	48.2	96	65 - 125	46.2	92	4	30
99-87-6	4-Isopropyltoluene	0.070U	0.070	50.0	52.1	104	75 - 130	53.0	106	2	30
594-20-7	2,2-Dichloropropane	0.170U	0.170	50.0	49.8	100	70 - 135	50.0	100	0	30
563-58-6	1,1-Dichloropropene	0.052U	0.052	50.0	52.9	106	75 - 130	53.6	107	1	30
142-28-9	1,3-Dichloropropane	0.059U	0.059	50.0	49.6	99	75 - 125	49.1	98	1	30
108-86-1	Bromobenzene	0.145U	0.145	50.0	49.6	99	75 - 125	50.4	101	2	30
95-49-8	2-Chlorotoluene	0.080U	0.080	50.0	50.7	101	75 - 125	51.9	104	2	30
106-43-4	4-Chlorotoluene	0.124U	0.124	50.0	53.0	106	75 - 130	54.2	108	2	30
98-06-6	tert-Butylbenzene	0.087U	0.087	50.0	53.9	108	70 - 130	54.9	110	2	30
135-98-8	sec-Butylbenzene	0.107U	0.107	50.0	55.9	112	70 - 125	57.7	115	3	30
541-73-1	1,3-Dichlorobenzene	0.138U	0.138	50.0	49.3	99	75 - 125	50.2	100	2	30
106-46-7	1,4-Dichlorobenzene	0.083U	0.083	50.0	49.2	98	75 - 125	50.0	100	2	30
104-51-8	n-Butylbenzene	0.123U	0.123	50.0	55.4	111	70 - 135	57.0	114	3	30
95-50-1	1,2-Dichlorobenzene	0.135U	0.135	50.0	50.0	100	70 - 120	51.0	102	2	30
87-68-3	Hexachlorobutadiene	0.265U	0.265	50.0	52.9	106	50 - 140	55.2	110	4	30
91-20-3	Naphthalene	0.176U	0.176	50.0	50.2	100	55 - 140	49.7	99	1	30
87-61-6	1,2,3-Trichlorobenzene	0.079U	0.079	50.0	56.2	112	55 - 140	57.6	115	2	30
75-35-4	1,1-Dichloroethene	0.200U	0.200	50.0	50.6	101	70 - 130	51.3	103	1	30
71-43-2	Benzene	0.111U	0.111	50.0	49.4	99	80 - 120	49.4	99	0	30
79-01-6	Trichloroethene	0.161U	0.161	50.0	48.6	97	70 - 125	48.2	96	1	30
108-88-3	Toluene	0.122U	0.122	50.0	49.0	98	75 - 120	49.8	100	2	30
108-90-7	Chlorobenzene	0.083U	0.083	50.0	47.0	94	80 - 120	47.3	95	1	30
Surrogate											
460-00-4	4-Bromofluorobenzene	48.7	97	50	49.6	99	75 - 120	49.4	99		

GC/MS Volatiles Quality Control Summary

Analytical Batch	531663	**Client ID**	MB531663			LCS531663				LCSD531663		
Prep Batch	N/A	**GCAL ID**	1312343			1312344				1312345		
		Sample Type	Method Blank			LCS				LCSD		
		Analytical Date	05/05/2014 00:03			05/04/2014 22:09				05/04/2014 22:32		
		Matrix	Water			Water				Water		
EPA 8260B		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**	
1868-53-7	Dibromofluoromethane	49.7	99	50	48.3	97	85 - 115	47.9	96			
2037-26-5	Toluene d8	52	104	50	48.7	97	85 - 120	48.8	98			
17060-07-0	1,2-Dichloroethane-d4	50.6	101	50	49.5	99	70 - 120	49.1	98			

Analytical Batch	531663	**Client ID**	MA01MW002			MA01MW002-ms				MA01MW002-sd		
Prep Batch	N/A	**GCAL ID**	21404241601			21404241602				21404241603		
		Sample Type	SAMPLE			MS				MSD		
		Analytical Date	05/05/2014 00:48			05/05/2014 01:56				05/05/2014 02:18		
		Matrix	Water			Water				Water		
SW-846 8260B		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**	
630-20-6	1,1,1,2-Tetrachloroethane	0.00	0.120	50.0	49.7	99	80 - 130	48.6	97	2	30	
71-55-6	1,1,1-Trichloroethane	0.00	0.123	50.0	49.2	98	65 - 130	47.7	95	3	30	
79-34-5	1,1,2,2-Tetrachloroethane	0.00	0.109	50.0	53.2	106	65 - 130	52.1	104	2	30	
79-00-5	1,1,2-Trichloroethane	0.00	0.159	50.0	50.0	100	75 - 125	48.3	97	3	30	
75-34-3	1,1-Dichloroethane	0.00	0.171	50.0	51.7	103	70 - 135	49.6	99	4	30	
75-35-4	1,1-Dichloroethene	0.00	0.200	50.0	55.5	111	70 - 130	54.0	108	3	30	
563-58-6	1,1-Dichloropropene	0.00	0.052	50.0	56.0	112	75 - 130	53.2	106	5	30	
87-61-6	1,2,3-Trichlorobenzene	0.00	0.079	50.0	58.3	117	55 - 140	55.9	112	4	30	
96-18-4	1,2,3-Trichloropropane	0.00	0.065	50.0	51.1	102	75 - 125	49.8	100	3	30	
120-82-1	1,2,4-Trichlorobenzene	0.00	0.105	50.0	58.1	116	65 - 135	55.9	112	4	30	
95-63-6	1,2,4-Trimethylbenzene	0.00	0.084	50.0	54.0	108	75 - 130	51.3	103	5	30	
96-12-8	1,2-Dibromo-3-chloropropane	0.00	0.194	50.0	57.5	115	50 - 130	55.7	111	3	30	
106-93-4	1,2-Dibromoethane	0.00	0.102	50.0	51.9	104	80 - 120	50.5	101	3	30	
95-50-1	1,2-Dichlorobenzene	0.00	0.135	50.0	51.8	104	70 - 120	49.8	100	4	30	
107-06-2	1,2-Dichloroethane	0.00	0.116	50.0	51.2	102	70 - 130	49.5	99	3	30	
78-87-5	1,2-Dichloropropane	0.00	0.150	50.0	50.4	101	75 - 125	48.1	96	5	30	
108-67-8	1,3,5-Trimethylbenzene	0.00	0.066	50.0	57.3	115	75 - 130	55.3	111	4	30	
541-73-1	1,3-Dichlorobenzene	0.00	0.138	50.0	51.4	103	65 - 130	49.3	99	4	30	
142-28-9	1,3-Dichloropropane	0.00	0.059	50.0	50.1	100	75 - 125	49.0	98	2	30	
106-46-7	1,4-Dichlorobenzene	0.00	0.083	50.0	50.5	101	65 - 130	48.7	97	4	30	
594-20-7	2,2-Dichloropropane	0.00	0.170	50.0	49.2	98	70 - 135	46.0	92	7	30	

GC/MS Volatiles Quality Control Summary

Analytical Batch 531663	**Client ID**	MA01MW002	MA01MW002-ms	MA01MW002-sd
Prep Batch N/A	**GCAL ID**	21404241601	21404241602	21404241603
	Sample Type	SAMPLE	MS	MSD
	Analytical Date	05/05/2014 00:48	05/05/2014 01:56	05/05/2014 02:18
	Matrix	Water	Water	Water

SW-846 8260B		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
78-93-3	2-Butanone	0.00	0.142	50.0	45.3	91	30 - 150	46.7	93	3	30
95-49-8	2-Chlorotoluene	0.00	0.080	50.0	53.0	106	75 - 125	51.3	103	3	30
591-78-6	2-Hexanone	0.00	0.122	50.0	50.0	100	55 - 130	48.9	98	2	30
106-43-4	4-Chlorotoluene	0.00	0.124	50.0	55.0	110	75 - 130	52.3	105	5	30
99-87-6	4-Isopropyltoluene	0.00	0.070	50.0	54.4	109	75 - 130	51.9	104	5	30
108-10-1	4-Methyl-2-pentanone	0.00	0.120	50.0	54.5	109	60 - 135	53.0	106	3	30
67-64-1	Acetone	0.00	0.193	50.0	48.9	98	40 - 140	48.8	98	0	30
71-43-2	Benzene	0.00	0.111	50.0	52.1	104	80 - 120	50.5	101	3	30
108-86-1	Bromobenzene	0.00	0.145	50.0	51.3	103	75 - 125	49.3	99	4	30
74-97-5	Bromochloromethane	0.00	0.127	50.0	51.2	102	65 - 130	49.5	99	3	30
75-27-4	Bromodichloromethane	0.00	0.083	50.0	50.5	101	75 - 120	49.7	99	2	30
75-25-2	Bromoform	0.00	0.215	50.0	54.1	108	70 - 130	52.5	105	3	30
74-83-9	Bromomethane	0.00	0.427	50.0	64.6	129	30 - 145	64.1	128	1	30
75-15-0	Carbon disulfide	0.00	0.190	50.0	55.1	110	35 - 160	52.0	104	6	30
56-23-5	Carbon tetrachloride	0.00	0.248	50.0	50.2	100	65 - 140	48.0	96	4	30
108-90-7	Chlorobenzene	0.00	0.083	50.0	49.1	98	80 - 120	46.8	94	5	30
75-00-3	Chloroethane	0.00	0.235	50.0	55.4	111	60 - 135	51.9	104	7	30
67-66-3	Chloroform	0.00	0.155	50.0	49.4	99	65 - 135	48.0	96	3	30
74-87-3	Chloromethane	0.00	0.144	50.0	63.7	**127***	40 - 125	61.7	123	3	30
74-95-3	Dibromomethane	0.00	0.211	50.0	50.8	102	75 - 125	49.2	98	3	30
75-71-8	Dichlorodifluoromethane	0.00	0.145	50.0	62.2	124	30 - 155	59.1	118	5	30
100-41-4	Ethylbenzene	0.00	0.109	50.0	51.4	103	75 - 125	49.3	99	4	30
87-68-3	Hexachlorobutadiene	0.00	0.265	50.0	56.7	113	50 - 140	53.2	106	6	30
98-82-8	Isopropylbenzene (Cumene)	0.00	0.130	50.0	54.6	109	75 - 125	52.0	104	5	30
75-09-2	Methylene chloride	0.00	0.149	50.0	57.6	115	55 - 140	55.3	111	4	30
91-20-3	Naphthalene	0.00	0.176	50.0	50.8	102	55 - 140	49.4	99	3	30
100-42-5	Styrene	0.00	0.089	50.0	48.0	96	65 - 135	45.8	92	5	30
127-18-4	Tetrachloroethene	0.00	0.193	50.0	50.9	102	45 - 150	48.2	96	5	30
108-88-3	Toluene	0.00	0.122	50.0	52.2	104	75 - 120	49.9	100	5	30
79-01-6	Trichloroethene	0.00	0.161	50.0	51.0	102	70 - 125	48.6	97	5	30
75-69-4	Trichlorofluoromethane	0.00	0.157	50.0	54.0	108	60 - 145	51.3	103	5	30
75-01-4	Vinyl chloride	0.00	0.127	50.0	57.3	115	50 - 145	54.0	108	6	30
156-59-2	cis-1,2-Dichloroethene	0.00	0.103	50.0	52.3	105	70 - 125	49.9	100	5	30

GC/MS Volatiles Quality Control Summary

Analytical Batch 531663	**Client ID**	MA01MW002	MA01MW002-ms	MA01MW002-sd
Prep Batch N/A	**GCAL ID**	21404241601	21404241602	21404241603
	Sample Type	SAMPLE	MS	MSD
	Analytical Date	05/05/2014 00:48	05/05/2014 01:56	05/05/2014 02:18
	Matrix	Water	Water	Water

SW-846 8260B		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
10061-01-5	cis-1,3-Dichloropropene	0.00	0.124	50.0	51.8	104	70 - 130	50.1	100	3	30
136777-61-2	m,p-Xylene	0.00	0.123	100	109	109	75 - 130	104	104	5	30
104-51-8	n-Butylbenzene	0.00	0.123	50.0	57.7	115	70 - 135	55.1	110	5	30
103-65-1	n-Propylbenzene	0.00	0.727	50.0	53.4	107	70 - 130	50.2	100	6	30
95-47-6	o-Xylene	0.00	0.055	50.0	54.0	108	80 - 120	51.6	103	5	30
135-98-8	sec-Butylbenzene	0.00	0.107	50.0	59.0	118	70 - 125	56.4	113	5	30
1634-04-4	tert-Butyl methyl ether (MTBE)	0.00	0.078	50.0	51.4	103	65 - 125	49.8	100	3	30
98-06-6	tert-Butylbenzene	0.00	0.087	50.0	56.1	112	70 - 130	53.8	108	4	30
156-60-5	trans-1,2-Dichloroethene	0.00	0.077	50.0	53.7	107	60 - 140	51.3	103	5	30
10061-02-6	trans-1,3-Dichloropropene	0.00	0.128	50.0	51.9	104	55 - 140	50.0	100	4	30
Surrogate											
460-00-4	4-Bromofluorobenzene	48.2	96	50	49.8	100	75 - 120	49.6	99		
1868-53-7	Dibromofluoromethane	49.5	99	50	48.7	97	85 - 115	47.7	95		
2037-26-5	Toluene d8	53.3	107	50	48.3	97	85 - 120	48.1	96		
17060-07-0	1,2-Dichloroethane-d4	51.4	103	50	49.6	99	70 - 120	50.6	101		

Analytical Batch 531681	**Client ID**	MB531681	LCS531681	LCSD531681
Prep Batch N/A	**GCAL ID**	1312393	1312394	1312395
	Sample Type	Method Blank	LCS	LCSD
	Analytical Date	05/05/2014 11:01	05/05/2014 08:34	05/05/2014 08:59
	Matrix	Water	Water	Water

EPA 8260B		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
67-64-1	Acetone	0.193U	0.193	50.0	51.8	104	40 - 140	54.8	110	6	30
74-97-5	Bromochloromethane	0.127U	0.127	50.0	52.4	105	65 - 130	52.6	105	0	30
75-27-4	Bromodichloromethane	0.083U	0.083	50.0	52.3	105	75 - 120	49.5	99	6	30
75-25-2	Bromoform	0.215U	0.215	50.0	52.1	104	70 - 130	51.5	103	1	30
74-83-9	Bromomethane	0.427U	0.427	50.0	51.8	104	30 - 145	52.6	105	2	30
75-15-0	Carbon disulfide	0.190U	0.190	50.0	52.6	105	35 - 160	49.1	98	7	30
56-23-5	Carbon tetrachloride	0.248U	0.248	50.0	53.5	107	65 - 140	52.4	105	2	30
75-00-3	Chloroethane	0.235U	0.235	50.0	52.4	105	60 - 135	51.9	104	1	30
136777-61-2	m,p-Xylene	0.123U	0.123	100	105	105	75 - 130	98.3	98	7	30

GC/MS Volatiles Quality Control Summary

Analytical Batch 531681	**Client ID**	MB531681	LCS531681	LCSD531681
Prep Batch N/A	**GCAL ID**	1312393	1312394	1312395
	Sample Type	Method Blank	LCS	LCSD
	Analytical Date	05/05/2014 11:01	05/05/2014 08:34	05/05/2014 08:59
	Matrix	Water	Water	Water

EPA 8260B		**Units**	ug/L	**Spike**			**Control**				**RPD**
		Result	**RDL**	**Added**	**Result**	**% R**	**Limits % R**	**Result**	**% R**	**RPD**	**Limit**
67-66-3	Chloroform	0.155U	0.155	50.0	49.6	99	65 - 135	48.6	97	2	30
74-87-3	Chloromethane	0.144U	0.144	50.0	49.5	99	40 - 125	48.1	96	3	30
74-95-3	Dibromomethane	0.211U	0.211	50.0	49.4	99	75 - 125	49.4	99	0	30
75-71-8	Dichlorodifluoromethane	0.145U	0.145	50.0	56.1	112	30 - 155	53.1	106	5	30
75-34-3	1,1-Dichloroethane	0.171U	0.171	50.0	51.0	102	70 - 135	50.6	101	1	30
107-06-2	1,2-Dichloroethane	0.116U	0.116	50.0	49.8	100	70 - 130	50.4	101	1	30
156-59-2	cis-1,2-Dichloroethene	0.103U	0.103	50.0	51.1	102	70 - 125	49.8	100	3	30
156-60-5	trans-1,2-Dichloroethene	0.077U	0.077	50.0	51.5	103	60 - 140	50.7	101	2	30
75-09-2	Methylene chloride	0.149U	0.149	50.0	48.4	97	55 - 140	48.8	98	1	30
78-87-5	1,2-Dichloropropane	0.150U	0.150	50.0	48.6	97	75 - 125	48.9	98	1	30
10061-01-5	cis-1,3-Dichloropropene	0.124U	0.124	50.0	51.3	103	70 - 130	51.6	103	1	30
10061-02-6	trans-1,3-Dichloropropene	0.128U	0.128	50.0	51.9	104	55 - 140	51.3	103	1	30
100-41-4	Ethylbenzene	0.109U	0.109	50.0	51.1	102	75 - 125	49.4	99	3	30
591-78-6	2-Hexanone	0.122U	0.122	50.0	51.5	103	55 - 130	52.6	105	2	30
98-82-8	Isopropylbenzene (Cumene)	0.130U	0.130	50.0	51.9	104	75 - 125	50.3	101	3	30
78-93-3	2-Butanone	0.142U	0.142	50.0	50.3	101	30 - 150	52.2	104	4	30
108-10-1	4-Methyl-2-pentanone	0.120U	0.120	50.0	50.2	100	60 - 135	53.6	107	7	30
103-65-1	n-Propylbenzene	0.727U	0.727	50.0	52.6	105	70 - 130	47.9	96	9	30
100-42-5	Styrene	0.089U	0.089	50.0	51.4	103	65 - 135	50.2	100	2	30
127-18-4	Tetrachloroethene	0.193U	0.193	50.0	53.6	107	45 - 150	50.6	101	6	30
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	0.120	50.0	51.9	104	80 - 130	50.3	101	3	30
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	0.109	50.0	54.1	108	65 - 130	52.5	105	3	30
120-82-1	1,2,4-Trichlorobenzene	0.105U	0.105	50.0	53.5	107	65 - 135	49.0	98	9	30
71-55-6	1,1,1-Trichloroethane	0.123U	0.123	50.0	52.3	105	65 - 130	50.6	101	3	30
79-00-5	1,1,2-Trichloroethane	0.159U	0.159	50.0	52.6	105	75 - 125	50.4	101	4	30
75-69-4	Trichlorofluoromethane	0.157U	0.157	50.0	56.8	114	60 - 145	53.8	108	5	30
96-18-4	1,2,3-Trichloropropane	0.065U	0.065	50.0	51.5	103	75 - 125	52.1	104	1	30
95-63-6	1,2,4-Trimethylbenzene	0.084U	0.084	50.0	50.7	101	75 - 130	47.5	95	7	30
108-67-8	1,3,5-Trimethylbenzene	0.066U	0.066	50.0	50.3	101	75 - 130	48.0	96	5	30
75-01-4	Vinyl chloride	0.127U	0.127	50.0	51.4	103	50 - 145	49.7	99	3	30
95-47-6	o-Xylene	0.055U	0.055	50.0	52.3	105	80 - 120	49.1	98	6	30
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	0.194	50.0	50.1	100	50 - 130	50.5	101	1	30
106-93-4	1,2-Dibromoethane	0.102U	0.102	50.0	52.0	104	80 - 120	52.0	104	0	30

GC/MS Volatiles Quality Control Summary

Analytical Batch	531681	**Client ID**	MB531681			LCS531681				LCSD531681		
Prep Batch	N/A	**GCAL ID**	1312393			1312394				1312395		
		Sample Type	Method Blank			LCS				LCSD		
		Analytical Date	05/05/2014 11:01			05/05/2014 08:34				05/05/2014 08:59		
		Matrix	Water			Water				Water		
EPA 8260B		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	0.078	50.0	50.0	100	65 - 125	51.4	103	3	30
99-87-6	4-Isopropyltoluene	0.070U	0.070	50.0	52.7	105	75 - 130	47.6	95	10	30
594-20-7	2,2-Dichloropropane	0.170U	0.170	50.0	52.9	106	70 - 135	52.1	104	2	30
563-58-6	1,1-Dichloropropene	0.052U	0.052	50.0	50.3	101	75 - 130	48.3	97	4	30
142-28-9	1,3-Dichloropropane	0.059U	0.059	50.0	50.9	102	75 - 125	50.7	101	0	30
108-86-1	Bromobenzene	0.145U	0.145	50.0	49.1	98	75 - 125	46.4	93	6	30
95-49-8	2-Chlorotoluene	0.080U	0.080	50.0	50.1	100	75 - 125	48.7	97	3	30
106-43-4	4-Chlorotoluene	0.124U	0.124	50.0	49.8	100	75 - 130	47.7	95	4	30
98-06-6	tert-Butylbenzene	0.087U	0.087	50.0	50.0	100	70 - 130	46.8	94	7	30
135-98-8	sec-Butylbenzene	0.107U	0.107	50.0	52.5	105	70 - 125	46.6	93	12	30
541-73-1	1,3-Dichlorobenzene	0.138U	0.138	50.0	51.8	104	75 - 125	48.2	96	7	30
106-46-7	1,4-Dichlorobenzene	0.083U	0.083	50.0	50.7	101	75 - 125	47.7	95	6	30
104-51-8	n-Butylbenzene	0.123U	0.123	50.0	53.9	108	70 - 135	48.5	97	11	30
95-50-1	1,2-Dichlorobenzene	0.135U	0.135	50.0	52.9	106	70 - 120	49.2	98	7	30
87-68-3	Hexachlorobutadiene	0.265U	0.265	50.0	57.1	114	50 - 140	47.3	95	19	30
91-20-3	Naphthalene	0.190J	0.176	50.0	50.8	102	55 - 140	51.6	103	2	30
87-61-6	1,2,3-Trichlorobenzene	0.079U	0.079	50.0	52.3	105	55 - 140	52.3	105	0	30
75-35-4	1,1-Dichloroethene	0.200U	0.200	50.0	55.6	111	70 - 130	52.8	106	5	30
71-43-2	Benzene	0.111U	0.111	50.0	49.2	98	80 - 120	47.9	96	3	30
79-01-6	Trichloroethene	0.161U	0.161	50.0	48.1	96	70 - 125	48.8	98	1	30
108-88-3	Toluene	0.122U	0.122	50.0	49.9	100	75 - 120	48.7	97	2	30
108-90-7	Chlorobenzene	0.083U	0.083	50.0	50.1	100	80 - 120	48.6	97	3	30
Surrogate											
460-00-4	4-Bromofluorobenzene	49.6	99	50	50.7	101	75 - 120	51	102		
1868-53-7	Dibromofluoromethane	48.8	98	50	49.2	98	85 - 115	50.9	102		
2037-26-5	Toluene d8	49	98	50	48.3	97	85 - 120	50.2	100		
17060-07-0	1,2-Dichloroethane-d4	49.3	99	50	47.1	94	70 - 120	50.1	100		

GC/MS Volatiles Quality Control Summary

Analytical Batch 531830	**Client ID**	MB531830	LCS531830	LCSD531830
Prep Batch N/A	**GCAL ID**	1313084	1313085	1313086
	Sample Type	Method Blank	LCS	LCSD
	Analytical Date	05/06/2014 16:42	05/06/2014 15:18	05/06/2014 15:38
	Matrix	Water	Water	Water

EPA 8260B		**Units**	ug/L	**Spike**			**Control**				**RPD**
		Result	**RDL**	**Added**	**Result**	**% R**	**Limits % R**	**Result**	**% R**	**RPD**	**Limit**
67-64-1	Acetone	0.193U	0.193	50.0	49.9	100	40 - 140	52.4	105	5	30
74-97-5	Bromochloromethane	0.127U	0.127	50.0	48.7	97	65 - 130	48.4	97	1	30
75-27-4	Bromodichloromethane	0.083U	0.083	50.0	50.1	100	75 - 120	49.5	99	1	30
75-25-2	Bromoform	0.215U	0.215	50.0	49.7	99	70 - 130	49.8	100	0	30
74-83-9	Bromomethane	0.427U	0.427	50.0	49.2	98	30 - 145	48.7	97	1	30
75-15-0	Carbon disulfide	0.190U	0.190	50.0	48.4	97	35 - 160	46.6	93	4	30
56-23-5	Carbon tetrachloride	0.248U	0.248	50.0	51.2	102	65 - 140	49.0	98	4	30
75-00-3	Chloroethane	0.235U	0.235	50.0	48.2	96	60 - 135	46.5	93	4	30
136777-61-2	m,p-Xylene	0.123U	0.123	100	95.9	96	75 - 130	94.4	94	2	30
67-66-3	Chloroform	0.155U	0.155	50.0	48.7	97	65 - 135	47.6	95	2	30
74-87-3	Chloromethane	0.144U	0.144	50.0	53.2	106	40 - 125	52.9	106	1	30
74-95-3	Dibromomethane	0.211U	0.211	50.0	49.5	99	75 - 125	49.9	100	1	30
75-71-8	Dichlorodifluoromethane	0.145U	0.145	50.0	49.7	99	30 - 155	50.0	100	1	30
75-34-3	1,1-Dichloroethane	0.171U	0.171	50.0	49.2	98	70 - 135	48.4	97	2	30
107-06-2	1,2-Dichloroethane	0.116U	0.116	50.0	49.2	98	70 - 130	49.5	99	1	30
156-59-2	cis-1,2-Dichloroethene	0.103U	0.103	50.0	50.1	100	70 - 125	49.6	99	1	30
156-60-5	trans-1,2-Dichloroethene	0.077U	0.077	50.0	50.1	100	60 - 140	49.1	98	2	30
75-09-2	Methylene chloride	0.149U	0.149	50.0	46.3	93	55 - 140	45.1	90	3	30
78-87-5	1,2-Dichloropropane	0.150U	0.150	50.0	50.3	101	75 - 125	50.8	102	1	30
10061-01-5	cis-1,3-Dichloropropene	0.124U	0.124	50.0	52.8	106	70 - 130	52.2	104	1	30
10061-02-6	trans-1,3-Dichloropropene	0.128U	0.128	50.0	52.7	105	55 - 140	54.6	109	4	30
100-41-4	Ethylbenzene	0.109U	0.109	50.0	50.8	102	75 - 125	50.1	100	1	30
591-78-6	2-Hexanone	0.122U	0.122	50.0	49.6	99	55 - 130	52.2	104	5	30
98-82-8	Isopropylbenzene (Cumene)	0.130U	0.130	50.0	49.3	99	75 - 125	47.4	95	4	30
78-93-3	2-Butanone	0.142U	0.142	50.0	54.7	109	30 - 150	56.9	114	4	30
108-10-1	4-Methyl-2-pentanone	0.120U	0.120	50.0	49.9	100	60 - 135	52.9	106	6	30
103-65-1	n-Propylbenzene	0.727U	0.727	50.0	53.6	107	70 - 130	53.6	107	0	30
100-42-5	Styrene	0.089U	0.089	50.0	47.7	95	65 - 135	47.1	94	1	30
127-18-4	Tetrachloroethene	0.193U	0.193	50.0	49.4	99	45 - 150	47.2	94	5	30
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	0.120	50.0	50.2	100	80 - 130	48.4	97	4	30
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	0.109	50.0	53.7	107	65 - 130	56.2	112	5	30
120-82-1	1,2,4-Trichlorobenzene	0.105U	0.105	50.0	47.1	94	65 - 135	47.3	95	0	30
71-55-6	1,1,1-Trichloroethane	0.123U	0.123	50.0	50.6	101	65 - 130	49.9	100	1	30

GC/MS Volatiles Quality Control Summary

Analytical Batch	531830	**Client ID**	MB531830			LCS531830				LCSD531830		
Prep Batch	N/A	**GCAL ID**	1313084			1313085				1313086		
		Sample Type	Method Blank			LCS				LCSD		
		Analytical Date	05/06/2014 16:42			05/06/2014 15:18				05/06/2014 15:38		
		Matrix	Water			Water				Water		
EPA 8260B		**Units**	ug/L	**Spike**	**Result**		**Control**		**Result**		**RPD**	**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**			**% R**		**Limit**
79-00-5	1,1,2-Trichloroethane	0.159U	0.159	50.0	50.3	101	75 - 125		49.5	99	2	30
75-69-4	Trichlorofluoromethane	0.157U	0.157	50.0	48.4	97	60 - 145		47.3	95	2	30
96-18-4	1,2,3-Trichloropropane	0.065U	0.065	50.0	52.0	104	75 - 125		55.8	112	7	30
95-63-6	1,2,4-Trimethylbenzene	0.084U	0.084	50.0	49.1	98	75 - 130		49.3	99	0	30
108-67-8	1,3,5-Trimethylbenzene	0.066U	0.066	50.0	53.5	107	75 - 130		54.0	108	1	30
75-01-4	Vinyl chloride	0.127U	0.127	50.0	52.6	105	50 - 145		51.2	102	3	30
95-47-6	o-Xylene	0.055U	0.055	50.0	48.3	97	80 - 120		47.9	96	1	30
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	0.194	50.0	49.7	99	50 - 130		50.8	102	2	30
106-93-4	1,2-Dibromoethane	0.102U	0.102	50.0	51.5	103	80 - 120		51.5	103	0	30
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	0.078	50.0	52.5	105	65 - 125		52.3	105	0	30
99-87-6	4-Isopropyltoluene	0.070U	0.070	50.0	48.7	97	75 - 130		47.7	95	2	30
594-20-7	2,2-Dichloropropane	0.170U	0.170	50.0	51.1	102	70 - 135		50.2	100	2	30
563-58-6	1,1-Dichloropropene	0.052U	0.052	50.0	52.1	104	75 - 130		50.2	100	4	30
142-28-9	1,3-Dichloropropane	0.059U	0.059	50.0	50.3	101	75 - 125		51.1	102	2	30
108-86-1	Bromobenzene	0.145U	0.145	50.0	50.8	102	75 - 125		52.6	105	3	30
95-49-8	2-Chlorotoluene	0.080U	0.080	50.0	52.0	104	75 - 125		52.2	104	0	30
106-43-4	4-Chlorotoluene	0.124U	0.124	50.0	53.4	107	75 - 130		53.7	107	1	30
98-06-6	tert-Butylbenzene	0.087U	0.087	50.0	54.5	109	70 - 130		54.5	109	0	30
135-98-8	sec-Butylbenzene	0.107U	0.107	50.0	54.4	109	70 - 125		53.6	107	1	30
541-73-1	1,3-Dichlorobenzene	0.138U	0.138	50.0	50.1	100	75 - 125		49.7	99	1	30
106-46-7	1,4-Dichlorobenzene	0.083U	0.083	50.0	48.4	97	75 - 125		48.8	98	1	30
104-51-8	n-Butylbenzene	0.123U	0.123	50.0	49.9	100	70 - 135		49.5	99	1	30
95-50-1	1,2-Dichlorobenzene	0.135U	0.135	50.0	50.2	100	70 - 120		50.5	101	1	30
87-68-3	Hexachlorobutadiene	0.265U	0.265	50.0	48.8	98	50 - 140		47.9	96	2	30
91-20-3	Naphthalene	0.176U	0.176	50.0	48.6	97	55 - 140		50.2	100	3	30
87-61-6	1,2,3-Trichlorobenzene	0.079U	0.079	50.0	48.6	97	55 - 140		48.6	97	0	30
75-35-4	1,1-Dichloroethene	0.200U	0.200	50.0	51.3	103	70 - 130		48.7	97	5	30
71-43-2	Benzene	0.111U	0.111	50.0	50.4	101	80 - 120		49.4	99	2	30
79-01-6	Trichloroethene	0.161U	0.161	50.0	48.8	98	70 - 125		47.8	96	2	30
108-88-3	Toluene	0.122U	0.122	50.0	48.9	98	75 - 120		48.3	97	1	30
108-90-7	Chlorobenzene	0.083U	0.083	50.0	48.4	97	80 - 120		47.5	95	2	30
Surrogate												
460-00-4	4-Bromofluorobenzene	50.3	101	50	49.9	100	75 - 120		49	98		

GC/MS Volatiles Quality Control Summary

Analytical Batch	531830	Client ID	MB531830	LCS531830	LCSD531830
Prep Batch	N/A	GCAL ID	1313084	1313085	1313086
		Sample Type	Method Blank	LCS	LCSD
		Analytical Date	05/06/2014 16:42	05/06/2014 15:18	05/06/2014 15:38
		Matrix	Water	Water	Water

EPA 8260B		Units	ug/L	Spike			Control				
		Result	RDL	Added	Result	% R	Limits % R	Result	% R	RPD	RPD Limit
1868-53-7	Dibromofluoromethane	49.4	99	50	49.5	99	85 - 115	48.8	98		
2037-26-5	Toluene d8	52.3	105	50	49.9	100	85 - 120	48.7	97		
17060-07-0	1,2-Dichloroethane-d4	51.6	103	50	49.1	98	70 - 120	49.3	99		

Analytical Batch	532018	Client ID	MB532018	LCS532018	LCSD532018
Prep Batch	N/A	GCAL ID	1313936	1313937	1313938
		Sample Type	Method Blank	LCS	LCSD
		Analytical Date	05/08/2014 12:22	05/08/2014 09:18	05/08/2014 09:41
		Matrix	Water	Water	Water

SW-846 8260B		Units	ug/L	Spike			Control				
		Result	RDL	Added	Result	% R	Limits % R	Result	% R	RPD	RPD Limit
67-64-1	Acetone	0.193U	0.193	50.0	62.5	125	40 - 140	64.0	128	2	30
74-97-5	Bromochloromethane	0.127U	0.127	50.0	51.1	102	65 - 130	53.5	107	5	30
75-27-4	Bromodichloromethane	0.083U	0.083	50.0	54.0	108	75 - 120	54.0	108	0	30
75-25-2	Bromoform	0.215U	0.215	50.0	47.8	96	70 - 130	47.4	95	1	30
74-83-9	Bromomethane	0.427U	0.427	50.0	58.8	118	30 - 145	56.7	113	4	30
75-15-0	Carbon disulfide	0.190U	0.190	50.0	53.8	108	35 - 160	48.5	97	10	30
56-23-5	Carbon tetrachloride	0.248U	0.248	50.0	56.2	112	65 - 140	57.4	115	2	30
75-00-3	Chloroethane	0.235U	0.235	50.0	52.0	104	60 - 135	49.8	100	4	30
136777-61-2	m,p-Xylene	0.123U	0.123	100	90.9	91	75 - 130	86.2	86	5	30
67-66-3	Chloroform	0.155U	0.155	50.0	51.2	102	65 - 135	50.8	102	1	30
74-87-3	Chloromethane	0.144U	0.144	50.0	50.5	101	40 - 125	50.1	100	1	30
74-95-3	Dibromomethane	0.211U	0.211	50.0	51.7	103	75 - 125	53.0	106	2	30
75-71-8	Dichlorodifluoromethane	0.145U	0.145	50.0	59.2	118	30 - 155	55.6	111	6	30
75-34-3	1,1-Dichloroethane	0.171U	0.171	50.0	52.1	104	70 - 135	52.2	104	0	30
107-06-2	1,2-Dichloroethane	0.116U	0.116	50.0	55.5	111	70 - 130	56.4	113	2	30
156-59-2	cis-1,2-Dichloroethene	0.103U	0.103	50.0	51.8	104	70 - 125	53.1	106	2	30
156-60-5	trans-1,2-Dichloroethene	0.077U	0.077	50.0	51.0	102	60 - 140	52.7	105	3	30
75-09-2	Methylene chloride	0.149U	0.149	50.0	50.2	100	55 - 140	51.3	103	2	30
78-87-5	1,2-Dichloropropane	0.150U	0.150	50.0	50.7	101	75 - 125	49.4	99	3	30
10061-01-5	cis-1,3-Dichloropropene	0.124U	0.124	50.0	55.5	111	70 - 130	52.5	105	6	30
10061-02-6	trans-1,3-Dichloropropene	0.128U	0.128	50.0	56.6	113	55 - 140	57.1	114	1	30

GC/MS Volatiles Quality Control Summary

Analytical Batch 532018	**Client ID**	MB532018	LCS532018	LCSD532018
Prep Batch N/A	**GCAL ID**	1313936	1313937	1313938
	Sample Type	Method Blank	LCS	LCSD
	Analytical Date	05/08/2014 12:22	05/08/2014 09:18	05/08/2014 09:41
	Matrix	Water	Water	Water

SW-846 8260B		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
100-41-4	Ethylbenzene	0.109U	0.109	50.0	46.3	93	75 - 125	44.7	89	4	30
591-78-6	2-Hexanone	0.122U	0.122	50.0	54.3	109	55 - 130	52.9	106	3	30
98-82-8	Isopropylbenzene (Cumene)	0.130U	0.130	50.0	47.7	95	75 - 125	44.1	88	8	30
78-93-3	2-Butanone	0.142U	0.142	50.0	56.2	112	30 - 150	58.9	118	5	30
108-10-1	4-Methyl-2-pentanone	0.120U	0.120	50.0	56.0	112	60 - 135	58.9	118	5	30
103-65-1	n-Propylbenzene	0.727U	0.727	50.0	48.5	97	70 - 130	48.5	97	0	30
100-42-5	Styrene	0.089U	0.089	50.0	44.7	89	65 - 135	44.7	89	0	30
127-18-4	Tetrachloroethene	0.193U	0.193	50.0	48.1	96	45 - 150	44.2	88	8	30
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	0.120	50.0	47.6	95	80 - 130	47.0	94	1	30
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	0.109	50.0	51.2	102	65 - 130	52.6	105	3	30
120-82-1	1,2,4-Trichlorobenzene	0.105U	0.105	50.0	48.7	97	65 - 135	47.0	94	4	30
71-55-6	1,1,1-Trichloroethane	0.123U	0.123	50.0	55.1	110	65 - 130	54.3	109	1	30
79-00-5	1,1,2-Trichloroethane	0.159U	0.159	50.0	48.4	97	75 - 125	46.2	92	5	30
75-69-4	Trichlorofluoromethane	0.157U	0.157	50.0	59.2	118	60 - 145	58.4	117	1	30
96-18-4	1,2,3-Trichloropropane	0.065U	0.065	50.0	50.8	102	75 - 125	52.5	105	3	30
95-63-6	1,2,4-Trimethylbenzene	0.084U	0.084	50.0	47.7	95	75 - 130	47.3	95	1	30
108-67-8	1,3,5-Trimethylbenzene	0.066U	0.066	50.0	47.7	95	75 - 130	47.4	95	1	30
75-01-4	Vinyl chloride	0.127U	0.127	50.0	50.6	101	50 - 145	52.2	104	3	30
95-47-6	o-Xylene	0.055U	0.055	50.0	47.0	94	80 - 120	45.6	91	3	30
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	0.194	50.0	48.4	97	50 - 130	50.7	101	5	30
106-93-4	1,2-Dibromoethane	0.102U	0.102	50.0	47.1	94	80 - 120	46.9	94	0	30
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	0.078	50.0	51.7	103	65 - 125	54.3	109	5	30
99-87-6	4-Isopropyltoluene	0.070U	0.070	50.0	46.5	93	75 - 130	46.1	92	1	30
594-20-7	2,2-Dichloropropane	0.170U	0.170	50.0	55.0	110	70 - 135	55.1	110	0	30
563-58-6	1,1-Dichloropropene	0.052U	0.052	50.0	52.8	106	75 - 130	50.9	102	4	30
142-28-9	1,3-Dichloropropane	0.059U	0.059	50.0	50.6	101	75 - 125	48.6	97	4	30
108-86-1	Bromobenzene	0.145U	0.145	50.0	47.8	96	75 - 125	49.0	98	2	30
95-49-8	2-Chlorotoluene	0.080U	0.080	50.0	48.7	97	75 - 125	48.6	97	0	30
106-43-4	4-Chlorotoluene	0.124U	0.124	50.0	47.7	95	75 - 130	48.6	97	2	30
98-06-6	tert-Butylbenzene	0.087U	0.087	50.0	48.9	98	70 - 130	49.2	98	1	30
135-98-8	sec-Butylbenzene	0.107U	0.107	50.0	47.1	94	70 - 125	45.8	92	3	30
541-73-1	1,3-Dichlorobenzene	0.138U	0.138	50.0	46.2	92	75 - 125	47.5	95	3	30
106-46-7	1,4-Dichlorobenzene	0.083U	0.083	50.0	46.5	93	75 - 125	46.1	92	1	30

GC/MS Volatiles Quality Control Summary

Analytical Batch 532018	**Client ID**	MB532018	LCS532018	LCSD532018
Prep Batch N/A	**GCAL ID**	1313936	1313937	1313938
	Sample Type	Method Blank	LCS	LCSD
	Analytical Date	05/08/2014 12:22	05/08/2014 09:18	05/08/2014 09:41
	Matrix	Water	Water	Water

SW-846 8260B		**Units**	ug/L	**Spike**			**Control**				**RPD**
		Result	**RDL**	**Added**	**Result**	**% R**	**Limits % R**	**Result**	**% R**	**RPD**	**Limit**
104-51-8	n-Butylbenzene	0.123U	0.123	50.0	50.7	101	70 - 135	47.6	95	6	30
95-50-1	1,2-Dichlorobenzene	0.135U	0.135	50.0	47.4	95	70 - 120	47.7	95	1	30
87-68-3	Hexachlorobutadiene	0.265U	0.265	50.0	52.5	105	50 - 140	47.9	96	9	30
91-20-3	Naphthalene	0.176U	0.176	50.0	48.5	97	55 - 140	49.9	100	3	30
87-61-6	1,2,3-Trichlorobenzene	0.079U	0.079	50.0	47.8	96	55 - 140	48.9	98	2	30
75-35-4	1,1-Dichloroethene	0.200U	0.200	50.0	52.1	104	70 - 130	50.0	100	4	30
71-43-2	Benzene	0.111U	0.111	50.0	49.9	100	80 - 120	50.1	100	0	30
79-01-6	Trichloroethene	0.161U	0.161	50.0	47.2	94	70 - 125	49.0	98	4	30
108-88-3	Toluene	0.122U	0.122	50.0	46.4	93	75 - 120	44.2	88	5	30
108-90-7	Chlorobenzene	0.083U	0.083	50.0	44.5	89	80 - 120	43.6	87	2	30
Surrogate											
460-00-4	4-Bromofluorobenzene	45.9	92	50	48.8	98	75 - 120	47.7	95		
1868-53-7	Dibromofluoromethane	52.2	104	50	50.9	102	85 - 115	52	104		
2037-26-5	Toluene d8	45.1	90	50	48	96	85 - 120	46	92		
17060-07-0	1,2-Dichloroethane-d4	56.7	113	50	53.7	107	70 - 120	55.1	110		

General Chromatography Quality Control Summary

Analytical Batch	531158	**Client ID**	MB531047	LCS531047	LCSD531047
Prep Batch	531047	**GCAL ID**	1309589	1309590	1309591
Prep Method	EPA 8330A	**Sample Type**	Method Blank	LCS	LCSD
		Prep Date	04/28/2014 03:00	04/28/2014 03:00	04/28/2014 03:00
		Analytical Date	04/28/2014 15:21	04/28/2014 16:25	04/28/2014 17:29
		Matrix	Water	Water	Water

EPA 8330A		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
2691-41-0	HMX	0.130U	0.130	2.00	1.67	84	80 - 115	1.80	90	7	30
121-82-4	RDX	0.170U	0.170	2.00	1.68	84	50 - 160	1.92	96	13	30
99-35-4	1,3,5-Trinitrobenzene	0.150U	0.150	2.00	1.47	74	65 - 140	1.62	81	10	30
99-65-0	1,3-Dinitrobenzene	0.150U	0.150	2.00	1.71	86	45 - 160	1.93	97	12	30
479-45-8	Tetryl	0.240U	0.240	2.00	0.549	27	20 - 175	0.498	25	10	30
98-95-3	Nitrobenzene	0.230U	0.230	2.00	1.77	89	50 - 140	1.94	97	9	30
118-96-7	2,4,6-Trinitrotoluene	0.270U	0.270	2.00	1.20	60	50 - 145	1.51	76	23	30
1946-51-0	4-Amino-2,6-dinitrotoluene	0.360U	0.360	2.00	1.55	78	55 - 155	1.69	85	9	30
355-72-78-2	2-Amino-4,6-dinitrotoluene	0.300U	0.300	2.00	1.47	74	50 - 155	1.71	86	15	30
121-14-2	2,4-Dinitrotoluene	0.290U	0.290	2.00	1.22	61	60 - 135	1.24	62	2	30
606-20-2	2,6-Dinitrotoluene	0.260U	0.260	2.00	1.57	79	60 - 135	1.83	92	15	30
88-72-2	2-Nitrotoluene	0.170U	0.170	2.00	1.56	78	45 - 135	1.64	82	5	30
99-08-1	3-Nitrotoluene	0.330U	0.330	2.00	1.82	91	50 - 130	2.10	105	14	30
99-99-0	4-Nitrotoluene	0.420U	0.420	2.00	1.70	85	50 - 130	2.16	108	24	30
55-63-0	Nitroglycerin	0.380U	0.380	2.00	1.49	75	40 - 140	1.73	87	15	30
78-11-5	Pentaerythritol Tetranitrate	0.590U	0.590	2.00	2.18	109	40 - 140	2.61	131	18	30
Surrogate											
528-29-0	1,2-Dinitrobenzene	1.29	65	2	1.4	70	60 - 140	1.53	77		

Analytical Batch	531158	**Client ID**	MA01MW002	MA01MW002-ms	MA01MW002-sd
Prep Batch	531047	**GCAL ID**	21404241601	21404241602	21404241603
Prep Method	EPA 8330A	**Sample Type**	SAMPLE	MS	MSD
		Prep Date	04/28/2014 03:00	04/28/2014 03:00	04/28/2014 03:00
		Analytical Date	04/28/2014 18:33	04/28/2014 19:36	04/28/2014 20:40
		Matrix	Water	Water	Water

SW-846 8330A Water		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
99-35-4	1,3,5-Trinitrobenzene	0.00	0.150	2.00	1.80	90	65 - 140	1.61	81	11	30
99-65-0	1,3-Dinitrobenzene	0.00	0.150	2.00	1.92	96	45 - 160	1.92	96	0	30
118-96-7	2,4,6-Trinitrotoluene	0.00	0.270	2.00	1.66	83	50 - 145	1.87	94	12	30
121-14-2	2,4-Dinitrotoluene	0.00	0.290	2.00	1.29	65	60 - 135	1.68	84	26	30

General Chromatography Quality Control Summary

Analytical Batch	531158	**Client ID**	MA01MW002	MA01MW002-ms	MA01MW002-sd
Prep Batch	531047	**GCAL ID**	21404241601	21404241602	21404241603
Prep Method	EPA 8330A	**Sample Type**	SAMPLE	MS	MSD
		Prep Date	04/28/2014 03:00	04/28/2014 03:00	04/28/2014 03:00
		Analytical Date	04/28/2014 18:33	04/28/2014 19:36	04/28/2014 20:40
		Matrix	Water	Water	Water

SW-846 8330A Water		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
606-20-2	2,6-Dinitrotoluene	0.00	0.260	2.00	1.75	88	60 - 135	1.95	98	11	30
355-72-78-2	2-Amino-4,6-dinitrotoluene	0.00	0.300	2.00	1.77	89	50 - 155	1.26	63	**34***	30
88-72-2	2-Nitrotoluene	0.00	0.170	2.00	1.77	89	45 - 135	1.81	91	2	30
99-08-1	3-Nitrotoluene	0.00	0.330	2.00	3.59	**180***	50 - 130	3.13	**157***	14	30
1946-51-0	4-Amino-2,6-dinitrotoluene	0.00	0.360	2.00	1.57	79	55 - 155	1.15	58	**31***	30
99-99-0	4-Nitrotoluene	0.00	0.420	2.00	2.10	105	50 - 130	1.72	86	20	30
2691-41-0	HMX	0.00	0.130	2.00	1.71	86	80 - 115	1.65	83	4	30
98-95-3	Nitrobenzene	0.00	0.230	2.00	1.97	99	50 - 140	1.53	77	25	30
55-63-0	Nitroglycerin	0.00	0.380	2.00	1.44	72	40 - 140	1.21	61	17	30
78-11-5	Pentaerythritol Tetranitrate	0.00	0.590	2.00	3.59	**180***	40 - 140	3.13	**157***	14	30
121-82-4	RDX	0.00	0.170	2.00	1.85	93	50 - 160	1.60	80	14	30
479-45-8	Tetryl	0.00	0.240	2.00	0.964	48	20 - 175	0.959	48	1	30
Surrogate											
528-29-0	1,2-Dinitrobenzene	1.39	70	2	1.64	82	60 - 140	1.29	65		

Inorganics Quality Control Summary

Analytical Batch 531323	**Client ID**	MB530904		LCS530904
Prep Batch 530904	**GCAL ID**	1308856		1308857
Prep Method EPA 3010A	**Sample Type**	Method Blank		LCS
	Prep Date	04/24/2014 15:50		04/24/2014 15:50
	Analytical Date	04/30/2014 09:54		04/30/2014 10:02
	Matrix	Water		Water

EPA 6020A		**Units**	ug/L	**Spike**	**Result**		**Control**
		Result	**RDL**	**Added**		**% R**	**Limits % R**
7429-90-5	Aluminum	5.00U	5.00	1000	940	94	80 - 120
7440-36-0	Antimony	0.50U	0.50	100	103	103	80 - 120
7440-38-2	Arsenic	0.25U	0.25	50.0	45.7	91	80 - 120
7440-39-3	Barium	0.25U	0.25	50.0	47.1	94	80 - 120
7440-41-7	Beryllium	0.25U	0.25	50.0	43.3	87	80 - 120
7440-43-9	Cadmium	0.25U	0.25	50.0	45.1	90	80 - 120
7440-70-2	Calcium	125U	125	25000	22900	92	80 - 120
7440-47-3	Chromium	0.25U	0.25	50.0	44.8	90	80 - 120
7440-48-4	Cobalt	0.25U	0.25	50.0	44.7	89	80 - 120
7440-50-8	Copper	0.25U	0.25	50.0	43.1	86	80 - 120
7439-89-6	Iron	25.0U	25.0	5000	4290	86	80 - 120
7439-92-1	Lead	0.25U	0.25	50.0	43.0	86	80 - 120
7439-95-4	Magnesium	25.0U	25.0	5000	4740	95	80 - 120
7439-96-5	Manganese	6.67	1.25	50.0	46.3	93	80 - 120
7439-98-7	Molybdenum	0.25U	0.25	50.0	45.4	91	80 - 120
7440-02-0	Nickel	0.50U	0.50	100	88.4	88	80 - 120
7440-09-7	Potassium	25.0U	25.0	5000	4750	95	80 - 120
7782-49-2	Selenium	0.33J	0.25	10.0	9.31	93	80 - 120
7440-22-4	Silver	0.25U	0.25	50.0	43.7	87	80 - 120
7440-23-5	Sodium	25.0U	25.0	5000	4640	93	80 - 120
7440-28-0	Thallium	0.25U	0.25	50.0	41.7	83	80 - 120
7440-32-6	Titanium	0.25U	0.25	50.0	45.1	90	80 - 120
7440-62-2	Vanadium	0.25U	0.25	50.0	46.3	93	80 - 120
7440-66-6	Zinc	5.00U	5.00	1000	888	89	80 - 120

Inorganics Quality Control Summary

Analytical Batch 531323	**Client ID**	MB530980		LCS530980
Prep Batch 530980	**GCAL ID**	1309194		1309195
Prep Method EPA 3010A	**Sample Type**	Method Blank		LCS
	Prep Date	04/25/2014 15:35		04/25/2014 15:35
	Analytical Date	04/29/2014 22:06		04/29/2014 22:13
	Matrix	Water		Water

EPA 6020A		**Units**	ug/L	**Spike**	**Result**		**Control**
		Result	**RDL**	**Added**		**% R**	**Limits % R**
7429-90-5	Aluminum	5.00U	5.00	1000	1000	100	80 - 120
7440-36-0	Antimony	0.50U	0.50	100	107	107	80 - 120
7440-38-2	Arsenic	0.25U	0.25	50.0	48.2	96	80 - 120
7440-39-3	Barium	0.25U	0.25	50.0	49.2	98	80 - 120
7440-41-7	Beryllium	0.25U	0.25	50.0	49.1	98	80 - 120
7440-43-9	Cadmium	0.25U	0.25	50.0	48.0	96	80 - 120
7440-70-2	Calcium	125U	125	25000	24400	98	80 - 120
7440-47-3	Chromium	0.25U	0.25	50.0	49.6	99	80 - 120
7440-48-4	Cobalt	0.25U	0.25	50.0	49.4	99	80 - 120
7440-50-8	Copper	0.25U	0.25	50.0	49.1	98	80 - 120
7439-89-6	Iron	25.0U	25.0	5000	4760	95	80 - 120
7439-92-1	Lead	0.25U	0.25	50.0	47.3	95	80 - 120
7439-95-4	Magnesium	25.0U	25.0	5000	5150	103	80 - 120
7439-96-5	Manganese	1.25U	1.25	50.0	49.6	99	80 - 120
7439-98-7	Molybdenum	0.25U	0.25	50.0	49.3	99	80 - 120
7440-02-0	Nickel	0.50U	0.50	100	99.4	99	80 - 120
7440-09-7	Potassium	25.0U	25.0	5000	4970	99	80 - 120
7782-49-2	Selenium	0.25U	0.25	10.0	10.0	100	80 - 120
7440-22-4	Silver	0.25U	0.25	50.0	50.4	101	80 - 120
7440-23-5	Sodium	25.0U	25.0	5000	5050	101	80 - 120
7440-28-0	Thallium	0.25U	0.25	50.0	46.4	93	80 - 120
7440-32-6	Titanium	0.25U	0.25	50.0	49.1	98	80 - 120
7440-62-2	Vanadium	0.25U	0.25	50.0	49.6	99	80 - 120
7440-66-6	Zinc	5.00U	5.00	1000	970	97	80 - 120

Inorganics Quality Control Summary

Analytical Batch	531323	**Client ID**	MA01MW002	MA01MW002-ms	MA01MW002-sd
Prep Batch	530904	**GCAL ID**	21404241601	21404241602	21404241603
Prep Method	EPA 3010A	**Sample Type**	SAMPLE	MS	MSD
		Prep Date	04/24/2014 15:50	04/24/2014 15:50	04/24/2014 15:50
		Analytical Date	04/30/2014 07:49	04/30/2014 07:57	04/30/2014 08:36
		Matrix	Water	Water	Water

SW-846 6020A		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
7429-90-5	Aluminum	9.89	25.0	1000	992	98	80 - 120	952	94	4	20
7440-36-0	Antimony	0.0	2.50	100	115	115	80 - 120	108	108	6	20
7440-38-2	Arsenic	0.69	1.25	50.0	50.4	99	80 - 120	47.9	94	5	20
7440-39-3	Barium	16.7	1.25	50.0	68.2	103	80 - 120	64.7	96	5	20
7440-41-7	Beryllium	0.0	1.25	50.0	45.6	91	80 - 120	41.4	83	10	20
7440-43-9	Cadmium	0.0	1.25	50.0	50.0	100	80 - 120	46.9	94	6	20
7440-70-2	Calcium	45000	625	25000	69300	97	80 - 120	67000	88	3	20
7440-47-3	Chromium	1.64	1.25	50.0	48.7	94	80 - 120	46.7	90	4	20
7440-48-4	Cobalt	0.0	1.25	50.0	47.8	96	80 - 120	45.3	91	5	20
7440-50-8	Copper	0.49	1.25	50.0	46.1	91	80 - 120	44.1	87	4	20
7439-89-6	Iron	0.0	125	5000	4520	90	80 - 120	4360	87	4	20
7439-92-1	Lead	0.0	1.25	50.0	46.0	92	80 - 120	44.2	88	4	20
7439-95-4	Magnesium	37800	125	5000	42300	92	80 - 120	41600	**76***	2	20
7439-96-5	Manganese	2.73	6.25	50.0	48.3	91	80 - 120	46.1	87	5	20
7439-98-7	Molybdenum	6.78	1.25	50.0	57.4	101	80 - 120	54.7	96	5	20
7440-02-0	Nickel	0.73	2.50	100	93.8	93	80 - 120	89.1	88	5	20
7440-09-7	Potassium	6300	125	5000	11600	105	80 - 120	11200	98	3	20
7782-49-2	Selenium	6.29	1.25	10.0	15.9	96	80 - 120	15.5	92	3	20
7440-22-4	Silver	0.0	1.25	50.0	45.9	92	80 - 120	44.0	88	4	20
7440-28-0	Thallium	0.0	1.25	50.0	42.6	85	80 - 120	41.9	84	2	20
7440-32-6	Titanium	0.0	1.25	50.0	49.9	100	80 - 120	44.9	90	11	20
7440-62-2	Vanadium	11.7	1.25	50.0	61.4	99	80 - 120	58.6	94	5	20
7440-66-6	Zinc	33.7	25.0	1000	966	93	80 - 120	916	88	5	20

Inorganics Quality Control Summary

Analytical Batch	531323	**Client ID**	MA01MW002			MA01MW002-ms			MA01MW002-sd			
Prep Batch	530904	**GCAL ID**	21404241601			21404241602			21404241603			
Prep Method	EPA 3010A	**Sample Type**	SAMPLE			MS			MSD			
		Prep Date	04/24/2014 15:50			04/24/2014 15:50			04/24/2014 15:50			
		Analytical Date	04/29/2014 18:11			04/29/2014 18:19			04/29/2014 18:27			
		Matrix	Water			Water			Water			
SW-846 6020A		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
7440-23-5	Sodium	532000	2000	5000	540000	**154***	80 - 120	521000	**-222***	4	20

Analytical Batch	531323	**Client ID**	MA01MW004			1309169MS			1309169MSD			
Prep Batch	530980	**GCAL ID**	21404241608			1309196			1309197			
Prep Method	EPA 3010A	**Sample Type**	SAMPLE			MS			MSD			
		Prep Date	04/25/2014 15:35			04/25/2014 15:35			04/25/2014 15:35			
		Analytical Date	04/30/2014 11:51			04/30/2014 11:59			04/30/2014 12:07			
		Matrix	Water			Water			Water			
EPA 6020A		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
7429-90-5	Aluminum	0.0	10.0	1000	972	97	80 - 120	969	97	0	20
7440-36-0	Antimony	0.0	1.00	100	113	113	80 - 120	115	115	1	20
7440-38-2	Arsenic	1.21	0.50	50.0	49.1	96	80 - 120	49.6	97	1	20
7440-39-3	Barium	21.8	0.50	50.0	71.8	100	80 - 120	72.4	101	1	20
7440-41-7	Beryllium	0.0	0.50	50.0	44.6	89	80 - 120	42.0	84	6	20
7440-43-9	Cadmium	0.0	0.50	50.0	48.7	97	80 - 120	48.6	97	0	20
7440-70-2	Calcium	42200	250	25000	65900	95	80 - 120	66100	95	0	20
7440-47-3	Chromium	0.58	0.50	50.0	46.5	92	80 - 120	46.8	92	1	20
7440-48-4	Cobalt	0.0	0.50	50.0	45.6	91	80 - 120	45.5	91	0	20
7440-50-8	Copper	0.51	0.50	50.0	44.3	87	80 - 120	44.5	88	1	20
7439-89-6	Iron	0.0	50.0	5000	4400	88	80 - 120	4420	88	1	20
7439-92-1	Lead	0.0	0.50	50.0	45.2	90	80 - 120	45.2	90	0	20
7439-96-5	Manganese	0.0	2.50	50.0	47.1	94	80 - 120	47.1	94	0	20
7439-98-7	Molybdenum	5.68	0.50	50.0	55.3	99	80 - 120	55.3	99	0	20
7440-02-0	Nickel	0.0	1.00	100	88.9	89	80 - 120	88.8	89	0	20
7440-09-7	Potassium	5550	50.0	5000	10200	94	80 - 120	10300	95	1	20
7782-49-2	Selenium	7.00	0.50	10.0	16.3	93	80 - 120	16.5	95	1	20
7440-22-4	Silver	0.0	0.50	50.0	44.5	89	80 - 120	44.6	89	0	20
7440-28-0	Thallium	0.0	0.50	50.0	41.3	83	80 - 120	41.7	83	1	20
7440-32-6	Titanium	0.0	0.50	50.0	47.1	94	80 - 120	47.6	95	1	20
7440-62-2	Vanadium	18.0	0.50	50.0	65.8	96	80 - 120	66.7	97	1	20

Inorganics Quality Control Summary

Analytical Batch	531323	**Client ID**	MA01MW004			1309169MS			1309169MSD			
Prep Batch	530980	**GCAL ID**	21404241608			1309196			1309197			
Prep Method	EPA 3010A	**Sample Type**	SAMPLE			MS			MSD			
		Prep Date	04/25/2014 15:35			04/25/2014 15:35			04/25/2014 15:35			
		Analytical Date	04/30/2014 11:51			04/30/2014 11:59			04/30/2014 12:07			
		Matrix	Water			Water			Water			
EPA 6020A		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**	
7440-66-6	Zinc	7.23	10.0	1000	896	89	80 - 120	904	90	1	20	

Analytical Batch	531323	**Client ID**	MA01MW004			1309169MS			1309169MSD			
Prep Batch	530980	**GCAL ID**	21404241608			1309196			1309197			
Prep Method	EPA 3010A	**Sample Type**	SAMPLE			MS			MSD			
		Prep Date	04/25/2014 15:35			04/25/2014 15:35			04/25/2014 15:35			
		Analytical Date	04/29/2014 19:46			04/29/2014 19:53			04/29/2014 20:01			
		Matrix	Water			Water			Water			
EPA 6020A		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**	
7439-95-4	Magnesium	37200	1250	5000	41400	85	80 - 120	41400	85	0	20	
7440-23-5	Sodium	322000	1250	5000	320000	**-42***	80 - 120	320000	**-42***	0	20	

Analytical Batch	531511	**Client ID**	MB531126		LCS531126		
Prep Batch	531126	**GCAL ID**	1309920		1309921		
Prep Method	EPA 3010A	**Sample Type**	Method Blank		LCS		
		Prep Date	04/28/2014 11:50		04/28/2014 11:50		
		Analytical Date	05/03/2014 04:21		05/03/2014 04:31		
		Matrix	Water		Water		
EPA 6020A		**Units**	ug/L	**Spike**	**Result**		**Control**
		Result	**RDL**	**Added**		**% R**	**Limits % R**
7429-90-5	Aluminum	5.00U	5.00	1000	990	99	80 - 120
7440-36-0	Antimony	0.50U	0.50	100	103	103	80 - 120
7440-38-2	Arsenic	0.25U	0.25	50.0	49.5	99	80 - 120
7440-39-3	Barium	0.25U	0.25	50.0	49.0	98	80 - 120
7440-41-7	Beryllium	0.25U	0.25	50.0	48.6	97	80 - 120
7440-43-9	Cadmium	0.25U	0.25	50.0	48.9	98	80 - 120
7440-70-2	Calcium	125U	125	25000	24800	99	80 - 120
7440-47-3	Chromium	0.76J	0.25	50.0	49.7	99	80 - 120
7440-48-4	Cobalt	0.25U	0.25	50.0	50.4	101	80 - 120

Inorganics Quality Control Summary

Analytical Batch	531511	**Client ID**	MB531126		LCS531126
Prep Batch	531126	**GCAL ID**	1309920		1309921
Prep Method	EPA 3010A	**Sample Type**	Method Blank		LCS
		Prep Date	04/28/2014 11:50		04/28/2014 11:50
		Analytical Date	05/03/2014 04:21		05/03/2014 04:31
		Matrix	Water		Water

EPA 6020A		**Units**	ug/L				
		Result	**RDL**	**Spike Added**	**Result**	**% R**	**Control Limits % R**
7440-50-8	Copper	0.25U	0.25	50.0	49.8	100	80 - 120
7439-89-6	Iron	25.0U	25.0	5000	4860	97	80 - 120
7439-92-1	Lead	0.25U	0.25	50.0	49.5	99	80 - 120
7439-95-4	Magnesium	25.0U	25.0	5000	5020	100	80 - 120
7439-96-5	Manganese	1.25U	1.25	50.0	49.1	98	80 - 120
7439-98-7	Molybdenum	0.25U	0.25	50.0	49.3	99	80 - 120
7440-02-0	Nickel	0.50U	0.50	100	100	100	80 - 120
7440-09-7	Potassium	25.0U	25.0	5000	5070	101	80 - 120
7782-49-2	Selenium	0.25U	0.25	10.0	9.36	94	80 - 120
7440-22-4	Silver	0.25U	0.25	50.0	48.5	97	80 - 120
7440-23-5	Sodium	25.6J	25.0	5000	5020	100	80 - 120
7440-28-0	Thallium	0.25U	0.25	50.0	46.7	93	80 - 120
7440-32-6	Titanium	0.25U	0.25	50.0	48.6	97	80 - 120
7440-62-2	Vanadium	0.25U	0.25	50.0	49.8	100	80 - 120
7440-66-6	Zinc	5.00U	5.00	1000	964	96	80 - 120

Analytical Batch	531679	**Client ID**	3AMW-06	1309629MS	1309629MSD	
Prep Batch	531126	**GCAL ID**	21404260901	1309922	1309923	
Prep Method	EPA 3010A	**Sample Type**	SAMPLE	MS	MSD	
		Prep Date	04/28/2014 11:50	04/28/2014 11:50	04/28/2014 11:50	
		Analytical Date	05/03/2014 15:20	05/03/2014 15:30	05/03/2014 15:40	
		Matrix	Water	Water	Water	

EPA 6020A		**Units**	ug/L								
		Result	**RDL**	**Spike Added**	**Result**	**% R**	**Control Limits % R**	**Result**	**% R**	**RPD**	**RPD Limit**
7429-90-5	Aluminum	21.0	5.00	1000	974	95	80 - 120	1000	98	3	20
7440-36-0	Antimony	0.0	0.50	100	104	104	80 - 120	108	108	4	20
7440-38-2	Arsenic	0.0	0.25	50.0	48.3	97	80 - 120	50.5	101	4	20
7440-39-3	Barium	34.0	0.25	50.0	85.6	103	80 - 120	88.0	108	3	20
7440-41-7	Beryllium	0.0	0.25	50.0	47.0	94	80 - 120	47.8	96	2	20
7440-43-9	Cadmium	0.0	0.25	50.0	49.1	98	80 - 120	50.7	101	3	20
7440-70-2	Calcium	9140	125	25000	32800	95	80 - 120	33700	98	3	20

Inorganics Quality Control Summary

Analytical Batch	531679	**Client ID**	3AMW-06	1309629MS	1309629MSD
Prep Batch	531126	**GCAL ID**	21404260901	1309922	1309923
Prep Method	EPA 3010A	**Sample Type**	SAMPLE	MS	MSD
		Prep Date	04/28/2014 11:50	04/28/2014 11:50	04/28/2014 11:50
		Analytical Date	05/03/2014 15:20	05/03/2014 15:30	05/03/2014 15:40
		Matrix	Water	Water	Water

EPA 6020A		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
7440-47-3	Chromium	0.0	0.25	50.0	49.3	99	80 - 120	50.8	102	3	20
7440-48-4	Cobalt	0.0	0.25	50.0	49.7	99	80 - 120	51.3	103	3	20
7440-50-8	Copper	0.51	0.25	50.0	49.9	99	80 - 120	51.4	102	3	20
7439-89-6	Iron	2750	25.0	5000	7540	96	80 - 120	7710	99	2	20
7439-92-1	Lead	0.0	0.25	50.0	49.2	98	80 - 120	50.8	102	3	20
7439-95-4	Magnesium	4740	25.0	5000	9490	95	80 - 120	9740	100	3	20
7439-96-5	Manganese	170	1.25	50.0	213	92	80 - 120	218	103	2	20
7439-98-7	Molybdenum	0.0	0.25	50.0	49.1	98	80 - 120	51.0	102	4	20
7440-02-0	Nickel	0.0	0.50	100	98.3	98	80 - 120	102	102	4	20
7440-09-7	Potassium	3140	25.0	5000	7890	95	80 - 120	8110	99	3	20
7782-49-2	Selenium	0.0	0.25	10.0	9.40	94	80 - 120	9.75	97	4	20
7440-22-4	Silver	0.0	0.25	50.0	49.1	98	80 - 120	51.0	102	4	20
7440-23-5	Sodium	2610	25.0	5000	7320	94	80 - 120	7460	97	2	20
7440-28-0	Thallium	0.0	0.25	50.0	46.2	92	80 - 120	48.1	96	4	20
7440-32-6	Titanium	0.0	0.25	50.0	47.2	94	80 - 120	48.6	97	3	20
7440-62-2	Vanadium	0.0	0.25	50.0	49.5	99	80 - 120	51.1	102	3	20
7440-66-6	Zinc	14.0	5.00	1000	955	94	80 - 120	985	97	3	20

Analytical Batch	532841	**Client ID**	MB532598	LCS532598
Prep Batch	532598	**GCAL ID**	1316999	1317000
Prep Method	EPA 3010A	**Sample Type**	Method Blank	LCS
		Prep Date	05/15/2014 16:30	05/15/2014 16:30
		Analytical Date	05/19/2014 13:59	05/19/2014 14:06
		Matrix	Water	Water

EPA 6020A		**Units**	ug/L	**Spike**	**Result**		**Control**
		Result	**RDL**	**Added**		**% R**	**Limits % R**
7440-47-3	Chromium	0.25U	0.25	50.0	52.2	104	80 - 120

Inorganics Quality Control Summary

Analytical Batch	531017	**Client ID**	MB530903			LCS530903		
Prep Batch	530903	**GCAL ID**	1308854			1308855		
Prep Method	EPA 7470A	**Sample Type**	Method Blank			LCS		
		Prep Date	04/24/2014 15:50			04/24/2014 15:50		
		Analytical Date	04/25/2014 18:00			04/25/2014 18:02		
		Matrix	Water			Water		
EPA 7470A		**Units**	ug/L	**Spike**	**Result**		**Control**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**	
7439-97-6	Mercury	0.070U	0.070	5.00	4.74	95	80 - 120	

Analytical Batch	531017	**Client ID**	MB530978			LCS530978		
Prep Batch	530978	**GCAL ID**	1309186			1309187		
Prep Method	EPA 7470A	**Sample Type**	Method Blank			LCS		
		Prep Date	04/25/2014 12:00			04/25/2014 12:00		
		Analytical Date	04/25/2014 18:32			04/25/2014 18:34		
		Matrix	Water			Water		
EPA 7470A		**Units**	ug/L	**Spike**	**Result**		**Control**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**	
7439-97-6	Mercury	0.070U	0.070	5.00	4.76	95	80 - 120	

Analytical Batch	531017	**Client ID**	MA01MW002			MA01MW002-ms			MA01MW002-sd			
Prep Batch	530903	**GCAL ID**	21404241601			21404241602			21404241603			
Prep Method	EPA 7470A	**Sample Type**	SAMPLE			MS			MSD			
	Dissolved	**Prep Date**	04/24/2014 15:50			04/24/2014 15:50			04/24/2014 15:50			
		Analytical Date	04/25/2014 18:23			04/25/2014 18:25			04/25/2014 18:27			
		Matrix	Water			Water			Water			
SW-846 7470A Dissolved		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**		**RPD**	**RPD**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**		**Limit**	
7439-97-6	Mercury	0.00000	0.070	5.00	3.88	**78***	80 - 120	3.82	**76***	1	20	

Inorganics Quality Control Summary

Analytical Batch	531017	**Client ID**	MA01MW004			1309169MS			1309169MSD			
Prep Batch	530978	**GCAL ID**	21404241608			1309188			1309189			
Prep Method	EPA 7470A	**Sample Type**	SAMPLE			MS			MSD			
		Prep Date	04/25/2014 12:00			04/25/2014 12:00			04/25/2014 12:00			
		Analytical Date	04/25/2014 18:35			04/25/2014 18:41			04/25/2014 18:42			
		Matrix	Water			Water			Water			
EPA 7470A		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**		**RPD**	**RPD**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**		**Limit**	
7439-97-6	Mercury	0.00000	0.070	5.00	3.92	78*	80 - 120	3.93	79*	0	30	

Analytical Batch	531182	**Client ID**	MB531125		LCS531125			
Prep Batch	531125	**GCAL ID**	1309916		1309917			
Prep Method	EPA 7470A	**Sample Type**	Method Blank		LCS			
		Prep Date	04/28/2014 14:30		04/28/2014 14:30			
		Analytical Date	04/28/2014 20:21		04/28/2014 20:23			
		Matrix	Water		Water			
EPA 7470A		**Units**	ug/L	**Spike**	**Result**		**Control**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**	
7439-97-6	Mercury	0.070U	0.070	5.00	4.94	99	80 - 120	

Inorganics Quality Control Summary

Analytical Batch	531017	**Client ID**	MB530903			LCS530903		
Prep Batch	530903	**GCAL ID**	1308854			1308855		
Prep Method	EPA 7470A	**Sample Type**	Method Blank			LCS		
		Prep Date	04/24/2014 15:50			04/24/2014 15:50		
		Analytical Date	04/25/2014 18:00			04/25/2014 18:02		
		Matrix	Water			Water		
EPA 7470A		**Units**	ug/L	**Spike**	**Result**		**Control**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**	
7439-97-6	Mercury	0.070U	0.070	5.00	4.74	95	80 - 120	

Analytical Batch	531017	**Client ID**	MB530978			LCS530978		
Prep Batch	530978	**GCAL ID**	1309186			1309187		
Prep Method	EPA 7470A	**Sample Type**	Method Blank			LCS		
		Prep Date	04/25/2014 12:00			04/25/2014 12:00		
		Analytical Date	04/25/2014 18:32			04/25/2014 18:34		
		Matrix	Water			Water		
EPA 7470A		**Units**	ug/L	**Spike**	**Result**		**Control**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**	
7439-97-6	Mercury	0.070U	0.070	5.00	4.76	95	80 - 120	

Analytical Batch	531017	**Client ID**	MA01MW002			MA01MW002-ms			MA01MW002-sd			
Prep Batch	530903	**GCAL ID**	21404241601			21404241602			21404241603			
Prep Method	EPA 7470A	**Sample Type**	SAMPLE			MS			MSD			
		Prep Date	04/24/2014 15:50			04/24/2014 15:50			04/24/2014 15:50			
		Analytical Date	04/25/2014 18:11			04/25/2014 18:12			04/25/2014 18:14			
		Matrix	Water			Water			Water			
EPA 7470A		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**		**RPD**	**RPD**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**		**Limit**	
7439-97-6	Mercury	0.00000	0.070	5.00	3.94	**79***	80 - 120	3.82	**76***	3	20	

Inorganics Quality Control Summary

Analytical Batch	531017	**Client ID**	MA01MW004			1309169MS			1309169MSD			
Prep Batch	530978	**GCAL ID**	21404241608			1309188			1309189			
Prep Method	EPA 7470A	**Sample Type**	SAMPLE			MS			MSD			
		Prep Date	04/25/2014 12:00			04/25/2014 12:00			04/25/2014 12:00			
		Analytical Date	04/25/2014 18:35			04/25/2014 18:41			04/25/2014 18:42			
		Matrix	Water			Water			Water			
EPA 7470A		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**		**RPD**	**RPD**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**		**Limit**	
7439-97-6	Mercury	0.00000	0.070	5.00	3.92	78*	80 - 120	3.93	79*	0	20	

Analytical Batch	531182	**Client ID**	MB531125		LCS531125			
Prep Batch	531125	**GCAL ID**	1309916		1309917			
Prep Method	EPA 7470A	**Sample Type**	Method Blank		LCS			
		Prep Date	04/28/2014 14:30		04/28/2014 14:30			
		Analytical Date	04/28/2014 20:21		04/28/2014 20:23			
		Matrix	Water		Water			
EPA 7470A		**Units**	ug/L	**Spike**	**Result**		**Control**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**	
7439-97-6	Mercury	0.070U	0.070	5.00	4.94	99	80 - 120	

Analytical Batch	531182	**Client ID**	3AMW-06			1309629MS			1309629MSD			
Prep Batch	531125	**GCAL ID**	21404260901			1309918			1309919			
Prep Method	EPA 7470A	**Sample Type**	SAMPLE			MS			MSD			
		Prep Date	04/28/2014 14:30			04/28/2014 14:30			04/28/2014 14:30			
		Analytical Date	04/28/2014 20:24			04/28/2014 20:26			04/28/2014 20:28			
		Matrix	Water			Water			Water			
EPA 7470A		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**		**RPD**	**RPD**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**		**Limit**	
7439-97-6	Mercury	0.00000	0.070	5.00	5.08	102	80 - 120	4.91	98	4	20	

Inorganics Quality Control Summary

Analytical Batch	531323	**Client ID**	MB530905	LCS530905
Prep Batch	530905	**GCAL ID**	1308858	1308859
Prep Method	EPA 3005A Dissolved	**Sample Type**	Method Blank	LCS
		Prep Date	04/25/2014 08:50	04/25/2014 08:50
		Analytical Date	04/29/2014 23:47	04/29/2014 23:55
		Matrix	Water	Water

EPA 6020A Dissolved		**Units**	ug/L	**Spike**	**Result**		**Control**
		Result	**RDL**	**Added**		**% R**	**Limits % R**
7429-90-5	Aluminum	5.00U	5.00	1000	989	99	80 - 120
7440-36-0	Antimony	0.50U	0.50	100	103	103	80 - 120
7440-38-2	Arsenic	0.25U	0.25	50.0	45.1	90	80 - 120
7440-39-3	Barium	0.25U	0.25	50.0	47.6	95	80 - 120
7440-41-7	Beryllium	0.25U	0.25	50.0	47.2	94	80 - 120
7440-43-9	Cadmium	0.25U	0.25	50.0	47.1	94	80 - 120
7440-70-2	Calcium	125U	125	25000	23300	93	80 - 120
7440-47-3	Chromium	0.25U	0.25	50.0	45.5	91	80 - 120
7440-48-4	Cobalt	0.25U	0.25	50.0	45.4	91	80 - 120
7440-50-8	Copper	0.25U	0.25	50.0	44.1	88	80 - 120
7439-89-6	Iron	25.0U	25.0	5000	4410	88	80 - 120
7439-92-1	Lead	0.25U	0.25	50.0	43.9	88	80 - 120
7439-95-4	Magnesium	25.0U	25.0	5000	4940	99	80 - 120
7439-96-5	Manganese	1.25U	1.25	50.0	46.1	92	80 - 120
7439-98-7	Molybdenum	0.25U	0.25	50.0	46.2	92	80 - 120
7440-02-0	Nickel	0.50U	0.50	100	90.5	91	80 - 120
7440-09-7	Potassium	25.0U	25.0	5000	4850	97	80 - 120
7782-49-2	Selenium	0.25U	0.25	10.0	9.99	100	80 - 120
7440-22-4	Silver	0.25U	0.25	50.0	44.9	90	80 - 120
7440-23-5	Sodium	25.0U	25.0	5000	4870	97	80 - 120
7440-28-0	Thallium	0.25U	0.25	50.0	42.9	86	80 - 120
7440-32-6	Titanium	0.25U	0.25	50.0	45.6	91	80 - 120
7440-62-2	Vanadium	0.25U	0.25	50.0	46.1	92	80 - 120
7440-66-6	Zinc	5.00U	5.00	1000	929	93	80 - 120

Inorganics Quality Control Summary

Analytical Batch	531323	**Client ID**	MA01MW002	MA01MW002-ms	MA01MW002-sd
Prep Batch	530905	**GCAL ID**	21404241601	21404241602	21404241603
Prep Method	EPA 3005A Dissolved	**Sample Type**	SAMPLE	MS	MSD
		Prep Date	04/25/2014 08:50	04/25/2014 08:50	04/25/2014 08:50
		Analytical Date	04/30/2014 11:04	04/30/2014 11:12	04/30/2014 11:20
		Matrix	Water	Water	Water

SW-846 6020A Dissolved		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
7429-90-5	Aluminum	270	25.0	1000	1100	83	80 - 120	1360	109	**21***	20
7440-36-0	Antimony	0.0	2.50	100	108	108	80 - 120	110	110	1	20
7440-38-2	Arsenic	0.79	1.25	50.0	47.5	93	80 - 120	47.1	93	1	20
7440-39-3	Barium	15.9	1.25	50.0	63.5	95	80 - 120	65.3	99	3	20
7440-41-7	Beryllium	0.0	1.25	50.0	42.9	86	80 - 120	43.4	87	1	20
7440-43-9	Cadmium	0.0	1.25	50.0	47.3	95	80 - 120	46.7	93	1	20
7440-70-2	Calcium	41900	625	25000	63700	87	80 - 120	63000	85	1	20
7440-47-3	Chromium	3.19	1.25	50.0	47.3	88	80 - 120	47.1	88	0	20
7440-48-4	Cobalt	0.0	1.25	50.0	44.9	90	80 - 120	43.9	88	2	20
7440-50-8	Copper	0.69	1.25	50.0	43.4	85	80 - 120	42.8	84	1	20
7439-89-6	Iron	114	125	5000	4360	85	80 - 120	4350	85	0	20
7439-92-1	Lead	0.0	1.25	50.0	43.0	86	80 - 120	42.6	85	1	20
7439-95-4	Magnesium	34600	125	5000	38600	**79***	80 - 120	38700	82	0	20
7439-96-5	Manganese	7.52	6.25	50.0	51.3	88	80 - 120	50.6	86	1	20
7439-98-7	Molybdenum	6.67	1.25	50.0	53.2	93	80 - 120	53.0	93	0	20
7440-02-0	Nickel	1.03	2.50	100	88.4	87	80 - 120	86.5	85	2	20
7440-09-7	Potassium	5830	125	5000	10800	100	80 - 120	10700	97	1	20
7782-49-2	Selenium	5.77	1.25	10.0	15.6	98	80 - 120	15.2	95	2	20
7440-22-4	Silver	0.0	1.25	50.0	28.0	**56***	80 - 120	41.7	83	**39***	20
7440-28-0	Thallium	0.0	1.25	50.0	41.1	82	80 - 120	40.7	81	1	20
7440-32-6	Titanium	6.02	1.25	50.0	45.3	**79***	80 - 120	57.4	103	**23***	20
7440-62-2	Vanadium	10.5	1.25	50.0	57.3	94	80 - 120	56.4	92	1	20
7440-66-6	Zinc	15.9	25.0	1000	909	89	80 - 120	897	88	1	20

Inorganics Quality Control Summary

Analytical Batch	531323	**Client ID**	MA01MW002			MA01MW002-ms			MA01MW002-sd		
Prep Batch	530905	**GCAL ID**	21404241601			21404241602			21404241603		
Prep Method	EPA 3005A	**Sample Type**	SAMPLE			MS			MSD		
	Dissolved	**Prep Date**	04/25/2014 08:50			04/25/2014 08:50			04/25/2014 08:50		
		Analytical Date	04/30/2014 00:26			04/30/2014 00:34			04/30/2014 00:49		
		Matrix	Water			Water			Water		
SW-846 6020A Dissolved		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
7440-23-5	Sodium	514000	2000	5000	506000	**-149***	80 - 120	516000	**39***	2	20

Analytical Batch	531511	**Client ID**	MB530979			LCS530979					
Prep Batch	530979	**GCAL ID**	1309190			1309191					
Prep Method	EPA 3005A	**Sample Type**	Method Blank			LCS					
	Dissolved	**Prep Date**	04/25/2014 15:40			04/25/2014 15:40					
		Analytical Date	05/03/2014 00:59			05/03/2014 01:09					
		Matrix	Water			Water					
EPA 6020A Dissolved		**Units**	ug/L	**Spike**	**Result**		**Control**				
		Result	**RDL**	**Added**		**% R**	**Limits % R**				
7429-90-5	Aluminum	5.00U	5.00	1000	939	94	80 - 120				
7440-36-0	Antimony	0.50U	0.50	100	106	106	80 - 120				
7440-38-2	Arsenic	0.25U	0.25	50.0	47.9	96	80 - 120				
7440-39-3	Barium	0.25U	0.25	50.0	46.4	93	80 - 120				
7440-41-7	Beryllium	0.25U	0.25	50.0	42.9	86	80 - 120				
7440-43-9	Cadmium	0.25U	0.25	50.0	46.6	93	80 - 120				
7440-70-2	Calcium	125U	125	25000	23200	93	80 - 120				
7440-47-3	Chromium	0.25U	0.25	50.0	46.0	92	80 - 120				
7440-48-4	Cobalt	0.25U	0.25	50.0	46.3	93	80 - 120				
7440-50-8	Copper	0.25U	0.25	50.0	45.7	91	80 - 120				
7439-89-6	Iron	25.0U	25.0	5000	4510	90	80 - 120				
7439-92-1	Lead	0.25U	0.25	50.0	45.6	91	80 - 120				
7439-95-4	Magnesium	25.0U	25.0	5000	4670	93	80 - 120				
7439-96-5	Manganese	1.25U	1.25	50.0	45.6	91	80 - 120				
7439-98-7	Molybdenum	0.25U	0.25	50.0	45.9	92	80 - 120				
7440-02-0	Nickel	0.50U	0.50	100	93.0	93	80 - 120				
7440-09-7	Potassium	25.0U	25.0	5000	4820	96	80 - 120				
7782-49-2	Selenium	0.25U	0.25	10.0	9.74	97	80 - 120				
7440-22-4	Silver	0.25U	0.25	50.0	44.7	89	80 - 120				
7440-23-5	Sodium	25.0U	25.0	5000	4590	92	80 - 120				
7440-28-0	Thallium	0.25U	0.25	50.0	43.4	87	80 - 120				

Inorganics Quality Control Summary

Analytical Batch	531511	**Client ID**	MB530979		LCS530979
Prep Batch	530979	**GCAL ID**	1309190		1309191
Prep Method	EPA 3005A	**Sample Type**	Method Blank		LCS
	Dissolved	**Prep Date**	04/25/2014 15:40		04/25/2014 15:40
		Analytical Date	05/03/2014 00:59		05/03/2014 01:09
		Matrix	Water		Water

EPA 6020A Dissolved		**Units**	ug/L				
		Result	**RDL**	**Spike Added**	**Result**	**% R**	**Control Limits % R**
7440-32-6	Titanium	0.25U	0.25	50.0	45.7	91	80 - 120
7440-62-2	Vanadium	0.25U	0.25	50.0	46.5	93	80 - 120
7440-66-6	Zinc	5.00U	5.00	1000	932	93	80 - 120

Analytical Batch	531511	**Client ID**	MA01MW004	1309169MS	1309169MSD	
Prep Batch	530979	**GCAL ID**	21404241608	1309192	1309193	
Prep Method	EPA 3005A	**Sample Type**	SAMPLE	MS	MSD	
	Dissolved	**Prep Date**	04/25/2014 15:40	04/25/2014 15:40	04/25/2014 15:40	
		Analytical Date	05/03/2014 02:26	05/03/2014 03:04	05/03/2014 03:14	
		Matrix	Water	Water	Water	

EPA 6020A Dissolved		**Units**	ug/L								
		Result	**RDL**	**Spike Added**	**Result**	**% R**	**Control Limits % R**	**Result**	**% R**	**RPD**	**RPD Limit**
7429-90-5	Aluminum	5.19	10.0	1000	921	92	80 - 120	894	89	3	20
7440-36-0	Antimony	0.0	1.00	100	108	108	80 - 120	106	106	2	20
7440-38-2	Arsenic	1.22	0.50	50.0	48.4	94	80 - 120	46.6	91	4	20
7440-39-3	Barium	21.0	0.50	50.0	68.4	95	80 - 120	67.5	93	1	20
7440-41-7	Beryllium	0.0	0.50	50.0	42.3	85	80 - 120	41.5	83	2	20
7440-43-9	Cadmium	0.0	0.50	50.0	46.6	93	80 - 120	45.7	91	2	20
7440-70-2	Calcium	42600	250	25000	66200	94	80 - 120	65100	90	2	20
7440-47-3	Chromium	0.69	0.50	50.0	45.8	90	80 - 120	44.3	87	3	20
7440-48-4	Cobalt	0.0	0.50	50.0	45.4	91	80 - 120	43.6	87	4	20
7439-89-6	Iron	0.0	50.0	5000	4400	88	80 - 120	4250	85	3	20
7439-92-1	Lead	0.0	0.50	50.0	45.6	91	80 - 120	45.0	90	1	20
7439-96-5	Manganese	0.0	2.50	50.0	45.3	91	80 - 120	43.5	87	4	20
7439-98-7	Molybdenum	5.73	0.50	50.0	53.9	96	80 - 120	53.0	95	2	20
7440-02-0	Nickel	0.0	1.00	100	88.5	88	80 - 120	85.8	86	3	20
7440-09-7	Potassium	5540	50.0	5000	10300	95	80 - 120	10100	90	2	20
7782-49-2	Selenium	6.76	0.50	10.0	16.2	95	80 - 120	15.9	92	2	20
7440-22-4	Silver	0.0	0.50	50.0	30.0	**60***	80 - 120	29.2	**58***	3	20
7440-28-0	Thallium	0.0	0.50	50.0	41.3	83	80 - 120	40.4	81	2	20
7440-32-6	Titanium	0.0	0.50	50.0	43.7	87	80 - 120	44.6	89	2	20

Inorganics Quality Control Summary

Analytical Batch	531511	**Client ID**	MA01MW004	1309169MS	1309169MSD
Prep Batch	530979	**GCAL ID**	21404241608	1309192	1309193
Prep Method	EPA 3005A	**Sample Type**	SAMPLE	MS	MSD
	Dissolved	**Prep Date**	04/25/2014 15:40	04/25/2014 15:40	04/25/2014 15:40
		Analytical Date	05/03/2014 02:26	05/03/2014 03:04	05/03/2014 03:14
		Matrix	Water	Water	Water

EPA 6020A Dissolved		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
7440-62-2	Vanadium	17.8	0.50	50.0	64.5	93	80 - 120	62.4	89	3	20
7440-66-6	Zinc	7.12	10.0	1000	901	89	80 - 120	875	87	3	20

Analytical Batch	531511	**Client ID**	MA01MW004	1309169MS	1309169MSD
Prep Batch	530979	**GCAL ID**	21404241608	1309192	1309193
Prep Method	EPA 3005A	**Sample Type**	SAMPLE	MS	MSD
	Dissolved	**Prep Date**	04/25/2014 15:40	04/25/2014 15:40	04/25/2014 15:40
		Analytical Date	05/03/2014 01:18	05/03/2014 01:28	05/03/2014 01:38
		Matrix	Water	Water	Water

EPA 6020A Dissolved		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
7439-95-4	Magnesium	34400	1250	5000	38400	**79***	80 - 120	38200	**74***	1	20
7440-23-5	Sodium	300000	1250	5000	301000	**35***	80 - 120	302000	**42***	0	20

Analytical Batch	531679	**Client ID**	MB531123	LCS531123
Prep Batch	531123	**GCAL ID**	1309908	1309909
Prep Method	EPA 3005A	**Sample Type**	Method Blank	LCS
	Dissolved	**Prep Date**	04/29/2014 09:00	04/29/2014 09:00
		Analytical Date	05/03/2014 13:15	05/03/2014 13:24
		Matrix	Water	Water

EPA 6020A Dissolved		**Units**	ug/L	**Spike**	**Result**		**Control**
		Result	**RDL**	**Added**		**% R**	**Limits % R**
7429-90-5	Aluminum	5.00U	5.00	1000	1020	102	80 - 120
7440-36-0	Antimony	0.50U	0.50	100	106	106	80 - 120
7440-38-2	Arsenic	0.25U	0.25	50.0	48.7	97	80 - 120
7440-39-3	Barium	0.25U	0.25	50.0	49.8	100	80 - 120
7440-41-7	Beryllium	0.25U	0.25	50.0	48.6	97	80 - 120
7440-43-9	Cadmium	0.25U	0.25	50.0	50.2	100	80 - 120
7440-70-2	Calcium	125U	125	25000	24200	97	80 - 120
7440-47-3	Chromium	0.25U	0.25	50.0	48.6	97	80 - 120

Inorganics Quality Control Summary

Analytical Batch	531679	**Client ID**	MB531123		LCS531123
Prep Batch	531123	**GCAL ID**	1309908		1309909
Prep Method	EPA 3005A	**Sample Type**	Method Blank		LCS
	Dissolved	**Prep Date**	04/29/2014 09:00		04/29/2014 09:00
		Analytical Date	05/03/2014 13:15		05/03/2014 13:24
		Matrix	Water		Water

EPA 6020A Dissolved		**Units**	ug/L				
		Result	**RDL**	**Spike Added**	**Result**	**% R**	**Control Limits % R**
7440-48-4	Cobalt	0.25U	0.25	50.0	48.9	98	80 - 120
7440-50-8	Copper	0.25U	0.25	50.0	47.6	95	80 - 120
7439-89-6	Iron	25.0U	25.0	5000	4690	94	80 - 120
7439-92-1	Lead	0.25U	0.25	50.0	48.5	97	80 - 120
7439-95-4	Magnesium	25.0U	25.0	5000	5070	101	80 - 120
7439-96-5	Manganese	1.25U	1.25	50.0	47.6	95	80 - 120
7439-98-7	Molybdenum	0.25U	0.25	50.0	49.1	98	80 - 120
7440-02-0	Nickel	0.50U	0.50	100	97.1	97	80 - 120
7440-09-7	Potassium	25.0U	25.0	5000	5060	101	80 - 120
7782-49-2	Selenium	0.25U	0.25	10.0	10.7	107	80 - 120
7440-22-4	Silver	0.25U	0.25	50.0	48.6	97	80 - 120
7440-23-5	Sodium	25.0U	25.0	5000	5050	101	80 - 120
7440-28-0	Thallium	0.25U	0.25	50.0	46.5	93	80 - 120
7440-32-6	Titanium	0.25U	0.25	50.0	47.7	95	80 - 120
7440-62-2	Vanadium	0.25U	0.25	50.0	49.3	99	80 - 120
7440-66-6	Zinc	5.00U	5.00	1000	963	96	80 - 120

Analytical Batch	531679	**Client ID**	M114MW004	1309612MS	1309612MSD	
Prep Batch	531123	**GCAL ID**	21404241614	1309910	1309911	
Prep Method	EPA 3005A	**Sample Type**	SAMPLE	MS	MSD	
	Dissolved	**Prep Date**	04/29/2014 09:00	04/29/2014 09:00	04/29/2014 09:00	
		Analytical Date	05/03/2014 13:34	05/03/2014 13:44	05/03/2014 14:22	
		Matrix	Water	Water	Water	

EPA 6020A Dissolved		**Units**	ug/L								
		Result	**RDL**	**Spike Added**	**Result**	**% R**	**Control Limits % R**	**Result**	**% R**	**RPD**	**RPD Limit**
7429-90-5	Aluminum	5.92	25.0	1000	990	98	80 - 120	994	99	1	20
7440-36-0	Antimony	0.59	2.50	100	110	110	80 - 120	112	111	1	20
7440-38-2	Arsenic	0.0	1.25	50.0	47.4	95	80 - 120	47.4	95	0	20
7440-39-3	Barium	16.3	1.25	50.0	66.8	101	80 - 120	68.3	104	2	20
7440-41-7	Beryllium	0.0	1.25	50.0	44.0	88	80 - 120	46.0	92	5	20
7440-43-9	Cadmium	0.0	1.25	50.0	49.3	99	80 - 120	49.7	99	1	20

Inorganics Quality Control Summary

Analytical Batch	531679	**Client ID**	M114MW004	1309612MS	1309612MSD
Prep Batch	531123	**GCAL ID**	21404241614	1309910	1309911
Prep Method	EPA 3005A	**Sample Type**	SAMPLE	MS	MSD
	Dissolved	**Prep Date**	04/29/2014 09:00	04/29/2014 09:00	04/29/2014 09:00
		Analytical Date	05/03/2014 13:34	05/03/2014 13:44	05/03/2014 14:22
		Matrix	Water	Water	Water

EPA 6020A Dissolved		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
7440-47-3	Chromium	1.08	1.25	50.0	47.3	92	80 - 120	47.8	94	1	20
7440-48-4	Cobalt	0.0	1.25	50.0	45.1	90	80 - 120	45.4	91	1	20
7440-50-8	Copper	0.51	1.25	50.0	43.0	85	80 - 120	43.8	87	2	20
7439-89-6	Iron	28.4	125	5000	4410	88	80 - 120	4420	88	0	20
7439-92-1	Lead	0.0	1.25	50.0	49.1	98	80 - 120	48.9	98	1	20
7439-96-5	Manganese	1.96	6.25	50.0	46.9	90	80 - 120	46.2	88	2	20
7439-98-7	Molybdenum	10.9	1.25	50.0	63.4	105	80 - 120	63.8	106	1	20
7440-02-0	Nickel	0.0	2.50	100	87.0	87	80 - 120	88.3	88	1	20
7440-09-7	Potassium	15300	125	5000	20100	95	80 - 120	20100	96	0	20
7782-49-2	Selenium	22.5	1.25	10.0	32.1	96	80 - 120	32.5	101	2	20
7440-22-4	Silver	0.54	1.25	50.0	45.5	90	80 - 120	46.3	91	2	20
7440-28-0	Thallium	0.0	1.25	50.0	40.6	81	80 - 120	41.1	82	1	20
7440-32-6	Titanium	0.0	1.25	50.0	49.8	100	80 - 120	48.2	96	3	20
7440-62-2	Vanadium	6.20	1.25	50.0	54.7	97	80 - 120	54.9	97	0	20
7440-66-6	Zinc	72.7	25.0	1000	924	85	80 - 120	932	86	1	20

Analytical Batch	531682	**Client ID**	M114MW004	1309612MS	1309612MSD
Prep Batch	531123	**GCAL ID**	21404241614	1309910	1309911
Prep Method	EPA 3005A	**Sample Type**	SAMPLE	MS	MSD
	Dissolved	**Prep Date**	04/29/2014 09:00	04/29/2014 09:00	04/29/2014 09:00
		Analytical Date	05/05/2014 19:00	05/05/2014 19:10	05/05/2014 19:20
		Matrix	Water	Water	Water

EPA 6020A Dissolved		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
7440-70-2	Calcium	439000	62500	25000	463000	95	80 - 120	465000	104	1	20
7439-95-4	Magnesium	311000	12500	5000	317000	110	80 - 120	315000	**76***	1	20
7440-23-5	Sodium	2390000	12500	5000	2380000	**-328***	80 - 120	2370000	**-498***	0	20

Inorganics Quality Control Summary

Analytical Batch	531759	**Client ID**	MA01MW004	1309169MS	1309169MSD
Prep Batch	530979	**GCAL ID**	21404241608	1309192	1309193
Prep Method	EPA 3005A	**Sample Type**	SAMPLE	MS	MSD
	Dissolved	**Prep Date**	04/25/2014 15:40	04/25/2014 15:40	04/25/2014 15:40
		Analytical Date	05/06/2014 09:51	05/06/2014 10:01	05/06/2014 10:10
		Matrix	Water	Water	Water

EPA 6020A Dissolved		**Units**	ug/L								
		Result	**RDL**	**Spike Added**	**Result**	**% R**	**Control Limits % R**	**Result**	**% R**	**RPD**	**RPD Limit**
7440-50-8	Copper	0.69	0.50	50.0	44.6	88	80 - 120	45.0	89	1	20

General Chemistry Quality Control Summary

Analytical Batch	530975	Client ID	MB530975			LCS530975		
Prep Batch	N/A	GCAL ID	1309176			1309177		
		Sample Type	Method Blank			LCS		
		Analytical Date	04/25/2014 13:01			04/25/2014 13:01		
		Matrix	Water			Water		
SM 2540 C-2011		**Units**	mg/L	**Spike**	**Result**		**Control**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**	
WET-035	Total Dissolved Solids(TDS)	6.00J	4.39	1000	878	88	80 - 120	

Analytical Batch	530975	Client ID	MA01MW002	1308691DUP		
Prep Batch	N/A	GCAL ID	21404241601	1309178		
		Sample Type	SAMPLE	DUP		
		Analytical Date	04/25/2014 13:01	04/25/2014 13:01		
		Matrix	Water	Water		
SM 2540 C-2011		**Units**	mg/L	**Result**	**RPD**	**RPD Limit**
		Result	**RDL**			
WET-035	Total Dissolved Solids(TDS)	1630	4.39	1660	2	5.4

Analytical Batch	531133	Client ID	MB531133			LCS531133		
Prep Batch	N/A	GCAL ID	1309937			1309938		
		Sample Type	Method Blank			LCS		
		Analytical Date	04/28/2014 15:45			04/28/2014 15:45		
		Matrix	Water			Water		
SM 2540 C-2011		**Units**	mg/L	**Spike**	**Result**		**Control**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**	
WET-035	Total Dissolved Solids(TDS)	4.39U	4.39	1000	826	83	80 - 120	

Analytical Batch	531133	Client ID	DUP-1	1309270DUP		
Prep Batch	N/A	GCAL ID	21404251010	1309939		
		Sample Type	SAMPLE	DUP		
		Analytical Date	04/28/2014 15:45	04/28/2014 15:45		
		Matrix	Water	Water		
SM 2540 C-2011		**Units**	mg/L	**Result**	**RPD**	**RPD Limit**
		Result	**RDL**			
WET-035	Total Dissolved Solids(TDS)	336	4.39	327	3	5.4

General Chemistry Quality Control Summary

Analytical Batch	531133	**Client ID**	CSSW-04		1309015DUP		
Prep Batch	N/A	**GCAL ID**	21404245208		1309940		
		Sample Type	SAMPLE		DUP		
		Analytical Date	04/28/2014 15:45		04/28/2014 15:45		
		Matrix	Water		Water		
SM 2540 C-2011		**Units**	mg/L		**Result**		**RPD**
		Result		**RDL**		**RPD**	**Limit**
WET-035	Total Dissolved Solids(TDS)	130		4.39	131	1	5.4

Analytical Batch	531134	**Client ID**	MB531134			LCS531134		
Prep Batch	N/A	**GCAL ID**	1309941			1309942		
		Sample Type	Method Blank			LCS		
		Analytical Date	04/28/2014 14:30			04/28/2014 14:30		
		Matrix	Water			Water		
SM 2540 C-2011		**Units**	mg/L		**Spike**	**Result**		**Control**
		Result		**RDL**	**Added**		**% R**	**Limits % R**
WET-035	Total Dissolved Solids(TDS)	4.39U		4.39	1000	832	83	80 - 120

Analytical Batch	531134	**Client ID**	M114MW001		1309181DUP			
Prep Batch	N/A	**GCAL ID**	21404241612		1309943			
		Sample Type	SAMPLE		DUP			
		Analytical Date	04/28/2014 14:30		04/28/2014 14:30			
		Matrix	Water		Water			
SM 2540 C-2011		**Units**	mg/L		**Result**		**RPD**	
		Result		**RDL**		**RPD**	**Limit**	
WET-035	Total Dissolved Solids(TDS)	8840		4.39	8640	2	5.4	

Analytical Batch	531254	**Client ID**	MB531254			LCS531254		
Prep Batch	N/A	**GCAL ID**	1310616			1310617		
		Sample Type	Method Blank			LCS		
		Analytical Date	04/29/2014 16:54			04/29/2014 16:54		
		Matrix	Water			Water		
SM 2540 C-2011		**Units**	mg/L		**Spike**	**Result**		**Control**
		Result		**RDL**	**Added**		**% R**	**Limits % R**
WET-035	Total Dissolved Solids(TDS)	4.39U		4.39	1000	886	89	80 - 120

General Chemistry Quality Control Summary

Analytical Batch	531254	**Client ID**	PCU OUTFALL 002		1308369DUP		
Prep Batch	N/A	**GCAL ID**	21404233401		1310618		
		Sample Type	SAMPLE		DUP		
		Analytical Date	04/29/2014 16:54		04/29/2014 16:54		
		Matrix	Water		Water		
SM 2540 C-2011		**Units**	mg/L		**Result**	**RPD**	**RPD Limit**
		Result		**RDL**			
WET-035	Total Dissolved Solids(TDS)	1120		4.39	1120	1	5.4

General Chemistry Quality Control Summary

Analytical Batch 530882	**Client ID**	MB530882			LCS530882			
Prep Batch N/A	**GCAL ID**	1308725			1308726			
	Sample Type	Method Blank			LCS			
	Analytical Date	04/24/2014 15:29			04/24/2014 15:30			
	Matrix	Water			Water			
EPA 353.2 Rev. 2		**Units**	mg/L-N	**Spike**	**Result**		**Control**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**	
14797-65-0 Nitrite		0.006U	0.006	0.500	0.493	99	90 - 110	

Analytical Batch 530882	**Client ID**	MA01MW002			MA01MW002-ms			MA01MW002-sd			
Prep Batch N/A	**GCAL ID**	21404241601			21404241602			21404241603			
	Sample Type	SAMPLE			MS			MSD			
	Analytical Date	04/24/2014 15:31			04/24/2014 15:32			04/24/2014 15:34			
	Matrix	Water			Water			Water			
EPA 353.2 Nitrite		**Units**	mg/L-N	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
14797-65-0 Nitrite		0.004	0.006	0.500	0.510	101	90 - 110	0.518	103	1	25

Analytical Batch 531008	**Client ID**	MB531008			LCS531008			
Prep Batch N/A	**GCAL ID**	1309381			1309382			
	Sample Type	Method Blank			LCS			
	Analytical Date	04/25/2014 16:15			04/25/2014 16:17			
	Matrix	Water			Water			
EPA 353.2 Rev. 2		**Units**	mg/L-N	**Spike**	**Result**		**Control**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**	
14797-65-0 Nitrite		0.006U	0.006	0.500	0.476	95	90 - 110	

Analytical Batch 531008	**Client ID**	MA01MW004			1309169MS			1309169MSD			
Prep Batch N/A	**GCAL ID**	21404241608			1309383			1309384			
	Sample Type	SAMPLE			MS			MSD			
	Analytical Date	04/25/2014 16:18			04/25/2014 16:19			04/25/2014 16:20			
	Matrix	Water			Water			Water			
EPA 353.2 Rev. 2		**Units**	mg/L-N	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
14797-65-0 Nitrite		0.000	0.006	0.500	0.480	96	90 - 110	0.480	96	0	25

General Chemistry Quality Control Summary

Analytical Batch 531063		**Client ID**	MB531063			LCS531063		
Prep Batch N/A		**GCAL ID**	1309687			1309688		
		Sample Type	Method Blank			LCS		
		Analytical Date	04/26/2014 13:37			04/26/2014 13:38		
		Matrix	Water			Water		
EPA 353.2 Rev. 2		**Units**	mg/L-N	**Spike**	**Result**		**Control**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**	
14797-65-0	Nitrite	0.006U	0.006	0.500	0.479	96	90 - 110	

Analytical Batch 531063		**Client ID**	M114MW004			1309612MS			1309612MSD			
Prep Batch N/A		**GCAL ID**	21404241614			1309689			1309690			
		Sample Type	SAMPLE			MS			MSD			
		Analytical Date	04/26/2014 13:39			04/26/2014 13:40			04/26/2014 13:42			
		Matrix	Water			Water			Water			
EPA 353.2 Rev. 2		**Units**	mg/L-N	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
14797-65-0	Nitrite	0.000	0.006	0.500	0.493	99	90 - 110	0.494	99	0	25

General Chemistry Quality Control Summary

Analytical Batch	530883	Client ID	MB530883			LCS530883		
Prep Batch	N/A	GCAL ID	1308727			1308728		
		Sample Type	Method Blank			LCS		
		Analytical Date	04/24/2014 15:01			04/24/2014 15:03		
		Matrix	Water			Water		
EPA 353.2 Rev. 2		**Units**	mg/L-N	**Spike**	**Result**		**Control**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**	
14797-55-8	Nitrate	0.008U	0.008	0.500	0.539	108	89.5 -110.5	

Analytical Batch	530883	Client ID	MA01MW002			MA01MW002-ms			MA01MW002-sd			
Prep Batch	N/A	GCAL ID	21404241601			21404241602			21404241603			
		Sample Type	SAMPLE			MS			MSD			
		Analytical Date	04/24/2014 15:09			04/24/2014 15:48			04/24/2014 15:49			
		Matrix	Water			Water			Water			
EPA 353.2 Nitrate		**Units**	mg/L-N	**Spike**	**Result**		**Control**	**Result**		**RPD**	**RPD**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**		**Limit**	
14797-55-8	Nitrate	0.368	0.008	0.500	0.905	107	89.5 -110.5	0.890	104	2	25	

Analytical Batch	531007	Client ID	MB531007			LCS531007		
Prep Batch	N/A	GCAL ID	1309377			1309378		
		Sample Type	Method Blank			LCS		
		Analytical Date	04/25/2014 15:49			04/25/2014 15:50		
		Matrix	Water			Water		
EPA 353.2 Rev. 2		**Units**	mg/L-N	**Spike**	**Result**		**Control**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**	
14797-55-8	Nitrate	0.008U	0.008	0.500	0.483	97	89.5 -110.5	

Analytical Batch	531007	Client ID	MA01MW004			1309169MS			1309169MSD			
Prep Batch	N/A	GCAL ID	21404241608			1309379			1309380			
		Sample Type	SAMPLE			MS			MSD			
		Analytical Date	04/25/2014 16:05			04/25/2014 16:06			04/25/2014 16:08			
		Matrix	Water			Water			Water			
EPA 353.2 Rev. 2		**Units**	mg/L-N	**Spike**	**Result**		**Control**	**Result**		**RPD**	**RPD**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**		**Limit**	
14797-55-8	Nitrate	0.504	0.016	1.00	1.52	102	89.5 -110.5	1.51	100	1	25	

General Chemistry Quality Control Summary

Analytical Batch	531064	Client ID	MB531064			LCS531064		
Prep Batch	N/A	GCAL ID	1309691			1309692		
		Sample Type	Method Blank			LCS		
		Analytical Date	04/26/2014 12:53			04/26/2014 12:54		
		Matrix	Water			Water		
EPA 353.2 Rev. 2		**Units**	mg/L-N	**Spike**	**Result**		**Control**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**	
14797-55-8	Nitrate	0.008U	0.008	0.500	0.513	102	89.5 -110.5	

Analytical Batch	531064	Client ID	M114MW004			1309612MS			1309612MSD			
Prep Batch	N/A	GCAL ID	21404241614			1309693			1309694			
		Sample Type	SAMPLE			MS			MSD			
		Analytical Date	04/26/2014 13:04			04/26/2014 13:14			04/26/2014 13:15			
		Matrix	Water			Water			Water			
EPA 353.2 Rev. 2		**Units**	mg/L-N	**Spike**	**Result**		**Control**	**Result**			**RPD**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**	
14797-55-8	Nitrate	0.532	0.016	1.00	1.56	103	89.5 -110.5	1.56	102	0	25	

General Chemistry Quality Control Summary

Analytical Batch	531116	**Client ID**	MB531116			LCS531116		
Prep Batch	N/A	**GCAL ID**	1309882			1309883		
		Sample Type	Method Blank			LCS		
		Analytical Date	04/28/2014 08:46			04/28/2014 09:04		
		Matrix	Water			Water		
EPA 300.0		**Units**	mg/L	**Spike**	**Result**		**Control**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**	
16887-00-6	Chloride	0.050U	0.050	2.50	2.43	97	79 - 109	
14808-79-8	Sulfate	0.050U	0.050	2.50	2.27	91	82 - 110	

Analytical Batch	531116	**Client ID**	MA01MW002			MA01MW002-ms			MA01MW002-sd			
Prep Batch	N/A	**GCAL ID**	21404241601			21404241602			21404241603			
		Sample Type	SAMPLE			MS			MSD			
		Analytical Date	04/28/2014 14:21			04/28/2014 14:39			04/28/2014 14:56			
		Matrix	Water			Water			Water			
EPA 300.0 Inorganic Anions		**Units**	mg/L	**Spike**	**Result**		**Control**	**Result**		**RPD**	**RPD**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**		**Limit**	
16887-00-6	Chloride	439	25.0	1250	1690	100	79 - 109	1690	100	0	15	
14808-79-8	Sulfate	527	25.0	1250	1710	95	82 - 110	1710	95	0	15	

Analytical Batch	531116	**Client ID**	MW-6			1308266MS			1308266MSD			
Prep Batch	N/A	**GCAL ID**	21404232010			1309884			1309885			
		Sample Type	SAMPLE			MS			MSD			
		Analytical Date	04/28/2014 09:39			04/28/2014 09:57			04/28/2014 10:14			
		Matrix	Water			Water			Water			
EPA 300.0		**Units**	mg/L	**Spike**	**Result**		**Control**	**Result**		**RPD**	**RPD**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**		**Limit**	
14808-79-8	Sulfate	3.87	0.050	2.50	3.84	**-1***	82 - 110	3.73	**-5***	3	15	

General Chemistry Quality Control Summary

Analytical Batch	531163	**Client ID**	MB531163			LCS531163					
Prep Batch	N/A	**GCAL ID**	1310259			1310260					
		Sample Type	Method Blank			LCS					
		Analytical Date	04/28/2014 23:27			04/28/2014 23:09					
		Matrix	Water			Water					
EPA 300.0		**Units**	mg/L	**Spike**		**Result**		**Control**			
		Result	**RDL**	**Added**			**% R**	**Limits % R**			
16887-00-6	Chloride	0.050U	0.050	2.50		2.43	97	79 - 109			
14808-79-8	Sulfate	0.050U	0.050	2.50		2.33	93	82 - 110			

Analytical Batch	531163	**Client ID**	MW-10			1308701MS			1308701MSD				
Prep Batch	N/A	**GCAL ID**	21404241502			1310261			1310262				
		Sample Type	SAMPLE			MS			MSD				
		Analytical Date	04/28/2014 22:17			04/28/2014 22:34			04/28/2014 22:52				
		Matrix	Water			Water			Water				
EPA 300.0		**Units**	mg/L	**Spike**		**Result**		**Control**	**Result**			**RPD**	
		Result	**RDL**	**Added**			**% R**	**Limits % R**		**% R**	**RPD**	**Limit**	
16887-00-6	Chloride	24.9	1.00	50.0		66.6	83	79 - 109	67.5	85	1	15	
14808-79-8	Sulfate	29.2	1.00	50.0		67.5	**77***	82 - 110	68.1	**78***	1	15	

Analytical Batch	531163	**Client ID**	MOU1-GW-384-LTM27			1308756MS			1308756MSD				
Prep Batch	N/A	**GCAL ID**	21404241902			1310263			1310264				
		Sample Type	SAMPLE			MS			MSD				
		Analytical Date	04/29/2014 03:51			04/29/2014 04:09			04/29/2014 04:26				
		Matrix	Water			Water			Water				
EPA 300.0		**Units**	mg/L	**Spike**		**Result**		**Control**	**Result**			**RPD**	
		Result	**RDL**	**Added**			**% R**	**Limits % R**		**% R**	**RPD**	**Limit**	
16887-00-6	Chloride	7.06	0.500	25.0		31.4	97	79 - 109	31.6	98	1	15	
14808-79-8	Sulfate	32.9	0.500	25.0		56.7	96	82 - 110	56.9	96	0	15	

General Chemistry Quality Control Summary

Analytical Batch 531016	**Client ID**	LCS531016	
Prep Batch N/A	**GCAL ID**	1309419	
	Sample Type	LCS	
	Analytical Date	04/26/2014 11:00	
	Matrix	Water	

SM 2320 B-2011		**Spike Added**	**Result**	**% R**	**Control Limits % R**
000000-00-5	Total Alkalinity	200	194	97	80 - 120

Analytical Batch 531016	**Client ID**	MA01MW003	1308696DUP	
Prep Batch N/A	**GCAL ID**	21404241605	1309420	
	Sample Type	SAMPLE	DUP	
	Analytical Date	04/26/2014 11:00	04/26/2014 11:00	
	Matrix	Water	Water	

SM 2320 B-2011		**Units**	mg/L CaCO3	**Result**	**RPD**	**RPD Limit**
		Result	**RDL**			
000000-00-5	Total Alkalinity	159	0.26	157	1	11

Analytical Batch 531016	**Client ID**	MA01MW002	1308691DUP	
Prep Batch N/A	**GCAL ID**	21404241601	1310051	
	Sample Type	SAMPLE	DUP	
	Analytical Date	04/26/2014 11:00	04/26/2014 11:00	
	Matrix	Water	Water	

SM 2320 B-2011		**Units**	mg/L CaCO3	**Result**	**RPD**	**RPD Limit**
		Result	**RDL**			
000000-00-5	Total Alkalinity	191	0.26	187	2	11

Analytical Batch 531150	**Client ID**	LCS531150	
Prep Batch N/A	**GCAL ID**	1310212	
	Sample Type	LCS	
	Analytical Date	04/28/2014 10:10	
	Matrix	Water	

SM 2320 B-2011		**Spike Added**	**Result**	**% R**	**Control Limits % R**
000000-00-5	Total Alkalinity	200	199	100	80 - 120

General Chemistry Quality Control Summary

Analytical Batch 531150	**Client ID**	EASC-701, SP024		1308273DUP		
Prep Batch N/A	**GCAL ID**	21404232102		1310213		
	Sample Type	SAMPLE		DUP		
	Analytical Date	04/28/2014 10:10		04/28/2014 10:10		
	Matrix	Water		Water		
SM 2320 B-2011		**Units**	mg/L CaCO3	**Result**		**RPD**
		Result	**RDL**		**RPD**	**Limit**
000000-00-5 Total Alkalinity		2180	0.26	2300	5	11

General Chemistry Quality Control Summary

Analytical Batch	531266	**Client ID**	MB530925			LCS530925		
Prep Batch	530925	**GCAL ID**	1308942			1308943		
Prep Method	Cyanide Prep	**Sample Type**	Method Blank			LCS		
		Prep Date	04/26/2014 12:00			04/26/2014 12:00		
		Analytical Date	04/29/2014 16:39			04/29/2014 16:40		
		Matrix	Water			Water		
EPA 9012B		**Units**	mg/L	**Spike**	**Result**		**Control**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**	
57-12-5	Cyanide	0.00050U	0.00050	0.020	0.017	83	80 - 120	

Analytical Batch	531266	**Client ID**	MB530925			LCSHI530925		
Prep Batch	530925	**GCAL ID**	1308942			1308944		
Prep Method	Cyanide Prep	**Sample Type**	Method Blank			LCSHI		
		Prep Date	04/26/2014 12:00			04/26/2014 12:00		
		Analytical Date	04/29/2014 16:39			04/29/2014 16:41		
		Matrix	Water			Water		
EPA 9012B		**Units**	mg/L	**Spike**	**Result**		**Control**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**	
57-12-5	Cyanide	0.00050U	0.00050	0.10	0.082	82	80 - 120	

Analytical Batch	531266	**Client ID**	MA01MW002			MA01MW002-ms			MA01MW002-sd			
Prep Batch	530925	**GCAL ID**	21404241601			21404241602			21404241603			
Prep Method	Cyanide Prep	**Sample Type**	SAMPLE			MS			MSD			
		Prep Date	04/26/2014 12:00			04/26/2014 12:00			04/26/2014 12:00			
		Analytical Date	04/29/2014 16:45			04/29/2014 16:46			04/29/2014 16:47			
		Matrix	Water			Water			Water			
SW-846 9012B Cyanide Water		**Units**	mg/L	**Spike**	**Result**		**Control**	**Result**		**RPD**	**RPD**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**		**Limit**	
57-12-5	Cyanide	0.0	0.00050	0.10	0.071	71*	80 - 120	0.071	71*	0	20	

General Chemistry Quality Control Summary

Analytical Batch	531266	**Client ID**	MA02MW001D-a			1309621MS		
Prep Batch	530925	**GCAL ID**	21404241618			1309643		
Prep Method	Cyanide Prep	**Sample Type**	FLDDUP			MS		
		Prep Date	04/26/2014 12:00			04/26/2014 12:00		
		Analytical Date	04/29/2014 16:58			04/29/2014 16:59		
		Matrix	Water			Water		
EPA 9012B		**Units**	mg/L	**Spike**	**Result**		**Control**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**	
57-12-5	Cyanide	0.0	0.00050	0.10	0.069	**69***	80 - 120	

Analytical Batch	531266	**Client ID**	MA02MW001D-a	1309621DUP			
Prep Batch	530925	**GCAL ID**	21404241618	1309644			
Prep Method	Cyanide Prep	**Sample Type**	FLDDUP	DUP			
		Prep Date	04/26/2014 12:00	04/26/2014 12:00			
		Analytical Date	04/29/2014 16:58	04/29/2014 17:00			
		Matrix	Water	Water			
EPA 9012B		**Units**	mg/L	**Result**		**RPD**	
		Result	**RDL**		**RPD**	**Limit**	
57-12-5	Cyanide	0.0	0.00050	0.0	0	25	

TRINITY ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Page 1 of 1

Project Number A012-107

Chain of Custody Number (1): 140423-01

Project Name / Site Name: Melrose Semi Spring 2014

Facility: Melrose Air Force Range

Client Name: USACE ABQ

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart 251-709-6509

Turn Around Time

24 Hour ☐
7 Day ☐
Standard X
Other ☐

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	Sample Code (2)	Sample Number (3)	Sample Matrix (4)	Sample Method (5)	Number of Containers	VOCs 8260B	Explosives 8330	Metals (Total & Diss.) 6020A	Cyanide 9012A	Mercury 7470A	Nitrate, Nitrite 300.0	Chloride, Sulfate 300.0	Perchlorate 6860	Alkalinity 2320B	TDS 2540C	Thallium (Total and Dissolved) 6020A	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID (Alphabetical Notation)
MAOIMW002		23042014	1006		N	1	WG		10	X	X	X	X	X	X	X	X	X	X	X				A
MAOIMW002-MS		23042014	1006		MS	1	WG		10	X	X	X	X	X	X	X	X	X	X	X				B
MAOIMW002-SD		23042014	1006		SD	1	WG		10	X	X	X	X	X	X	X	X	X	X	X				B
TB-1		23042014	1006		TB	1	WQ		3	X														A
MAOIMW003		23042014	1308		N	1	WG		10	X	X	X	X	X	X	X	X	X	X	X				A
MAOIMW001		23042014	1416		N	1	WG		10	X	X	X	X	X	X	X	X	X	X	X				C
TB-2		23042014	1416		TB	1	WQ		3	X														C

1 3 4 5 6 7

Client ID: 4747 - TRINITY Analysis & Development Corp.
SDG: 214042416
Due Date: 05/01/14

Comments: Dissolved metals were field filtered.

3,4 25 2,2 Ecc

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received by (Signed)	Date	Time
1.		4-23-14	1700	1. Cjaucien	4/24/14	905
2.	Fed Ex	4/24/14	905	2.		
3.				3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:	NO
Method of Shipment:	Fedex
Analytical Lab:	GCAL
Lab Recipient:	
Shipped: No.:	3
Airbill Number:	8053 1078 7416
Delivery Location:	Baton Rouge, LA
Delivery Date/Time:	

1.) Chain of Custody Number = site name (e.g., SS-125) and then date (yymmdd) collected + custody number (e.g. SS1251207201)....July 20, 2012. (12 Characters Max: No Dashes)
2.) Sample Type Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike (-ms), SD = Matrix Spike Duplicate (-sd), AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-01 on 07/20/12 = 1, if sampled again on 07/20/12 = 2, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Ground Water , WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS= Suface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ= Soil Blanks
5.) Sample Method Codes: CS = Composite Sample, E2 = Elec. Submersible Pump (1982 +), G = Grab, H = Hollow Stem Auger, PP = Peristaltic Pump, W = Swab or Wipe. (See handout for more methods)
6.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
7.) Quality assurance samples are assigned by date and the number (Alternating) of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or ambient blank collected on July 20, 2012 in association with samples on the COC will be designated **20071201** in the Blank Lot Control Number field).

NOTES: Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c. ERPIMS LOCID for TB, EB and AB are designated as FIELDQC samples.

TRINITY ANALYSIS & DEVELOPMENT CORP
Environmental & Engineering Services

Chain of Custody and Analytical Request

Page 1 of 1

Project Number: A012-107

Chain of Custody Number (1): 1404401

Project Name / Site Name: Melrose Semi Spring 2014	
Facility: Melrose Air Force Range	
Client Name: USACE ABQ	
Project Manager: Jonathan Kramer	
Collected by: Benjamin Stewart 251-709-6509	

Turn Around Time

24 Hour	☐
7 Day	☐
Standard	X
Other	☐

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	Sample Code (2)	Sample Number (3)	Sample Matrix (4)	Sample Method (5)	Number of Containers	VOCs 8260B	Explosives 8330	Metals (Total & Diss.) 6020A	Cyanide 9012A	Mercury 7470A	Nitrate, Nitrite 300.0	Chloride, Sulfate 300.0	Perchlorate 6860	Alkalinity 2320B	TDS 2540C	Thallium (Total and Dissolved) 6020A	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Code: (1) (Alphabetical Notation)	
MA01MW004		24042014	1010		N	1	WG		10	X	X	X	X	X	X	X	X	X	X	X				A	-08
M114MW003		24042014	1200		N	1	WG		10	X	X	X	X	X	X	X	X	X	X	X				A	-09
TB-3		24042014	1016		TB	1	WQ		3	X														A	-10
M114MW002		24042014	1308		N	1	WG		10	X	X	X	X	X	X	X	X	X	X	X				B	-11
M114MW001		24042014	1430		N	1	WG		10	X	X	X	X	X	X	X	X	X	X	X				B	-12
TB-4		24042014	1309		TB	1	WQ		3	X														B	-13

Client ID: 4747 - TRINITY Analysis & Development Corp.
SDG: 214042416
Due Date: 05/01/14

Comments: Dissolved metals were field filtered.

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received by (Signed)	Date	Time
1.		4/24/14	1700	FedEx	4/24/14	1740
2.	FedEx	4/25/14	0915	[illegible]	4/25/14	0915
3.						

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:	No	Shipped: No.:	2
Method of Shipment:	FedEx	Airbill Number:	
Analytical Lab:	GCAL	Delivery Location:	Baton Rouge, LA
Lab Recipient:		Delivery Date/Time:	

1.) Chain of Custody Number = site name (e.g., *SS-125*) and *then* date (yymmdd) collected + custody number (e.g. **SS125120720l**)... July 20, 2012. (12 Characters Max: No Dashes)

2.) Sample Type Codes: N = Normal Sample, TB = Trip Blank (-e) Sample, FD = Field Duplicate (-a) Sample, FR = Field Replicate (-b) Sample, EB = Equipment *Blank (-d)* Samples, MS = *Matrix* Spike (-ms), SD = Matrix Spike Duplicate (-sd), AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. *Groundwater sample collected from* MW-01 on 07/20/12 = 1, if sampled again on 07/20/12 = 2, etc.)

4.) Matrix Codes: *GS = Soil Gas*. WG = Ground Water , WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS= Sufoce Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ= *Soil Blanks*

5.) Sample Method Codes: CS = Composite Sample, ES = Elec. Submersible Pump (1982 +), G = Grab, H = Hollow Stem Auger, *PP = Peristaltic Pump*, W = Swab or Wipe. (See handout for more methods)

6.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

7.) Quality assurance samples are assigned by date and the number (Alphanumeric) of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or *ambient blank collected on* July 20, 2012 in association with samples on the COC will be designated **20071201** in the Blank Lot Control Number field).

NOTES: Trip Blanks *shall correspond* to the first well sampled with VOCs, for example: ST069-MW-08S-e. ERPIMS LOCID for TB, EB and AB are designated as FIELDQC samples.

8053-1078-7424

3.6 E22
2.7

TRINITY ANALYSIS & DEVELOPMENT CORP
Environmental & Engineering Services

Chain of Custody and Analytical Request

Page 1 of 1

Project Number: A012-107

Chain of Custody Number (1): 14042501

Project Name / Site Name: Melrose Semi Spring 2014

Facility: Melrose Air Force Range

Client Name: USACE ABQ

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart 251-709-6509

Turn Around Time

24 Hour ☐
7 Day ☐
Standard X
Other ☐

Sample Analysis Requested (4)

Quality Assurance Samples (7)

Field Sample ID (20 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	Sample Code (2)	Sample Number (3)	Sample Matrix (4)	Sample Method (5)	Number of Containers	VOCs 8260B	Explosives 8330	Metals (Total & Diss.) 6020A	Cyanide 9012A	Mercury 7470A	Nitrate, Nitrite 300.0	Chloride, Sulfate 300.0	Perchlorate 6860	Alkalinity 2320B	TDS 2540C	Thallium (Total and Dissolved) 6020A	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID (Alphabetical Notation)
M114MW004		25-04-2014	0935		N	1	WG		10	X	X	X	X	X	X	X	X	X	X	X			QA 0414	A
MW24		25-04-2014	1100		N	1	WG		10	X	X	X	X	X	X	X	X	X	X	X			15	A
TB-6		25-04-2014	0925		TB	1	WQ		3	X													16	A
MA023MW003D		25-04-2014	1252		N	1	WG		10	X	X	X	X	X	X	X	X	X	X	X			17	B
MA023MW003D-a		25-04-2014	1252		FD	1	WG		10	X	X	X	X	X	X	X	X	X	X	X			18	B
TB-7		25-04-2014	1252		TB	1	WQ		3	X													19	B

Client ID: 4747 - TRINITY Analysis & Development Corp.
SDG: 214042416
Due Date: 05/05/14

Comments: Dissolved metals were field filtered.

8053 1078 7438

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received by (Signed)	Date	Time
1.		4/25/14	1600	FedEx		
2.	FedEx	4/26/14	905	Allison Nagy	4/26/14	0905
3.						

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:	No	Shipped: No.:	2
Method of Shipment:	FedEx	Airbill Number:	
Analytical Lab:	GCAL	Delivery Location:	Baton Rouge, LA
Lab Recipient:		Delivery Date/Time:	

1.06,1.8 E24

1.) Chain of Custody Number = site name (e.g., SS-125) and then date (yyyymdd) collected + custody number (e.g. SS1251207201)...July 20, 2012. (12 Characters Max: No Dashes)

2.) Sample Type Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike (-ms), SD = Matrix Spike Duplicate (-sd), AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-01 on 07/20/12 = 1, if sampled again on 07/20/12 = 2, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Ground Water, WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ= Soil Blanks

5.) Sample Method Codes: CS = Composite Sample, E2 = Elec. Submersible Pump (1982 -), G = Grab, H = Hollow Stem Auger, PP = Peristaltic Pump, W = Swab or Wipe. (See handout for more methods)

6.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

7.) Quality assurance samples are assigned by date and the number (chronological) of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or ambient blank collected on July 20, 2012 in association with samples on the COC will be designated 20071201 in the Blank Lot Control Number field).

NOTES: Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-085-c. ERPIMS LOCID for TB, EB and AB are designated as FIELDQC samples.

GCAL ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIVING CHECKLIST

* 2 1 4 0 4 2 4 1 6 *

SAMPLE DELIVERY GROUP 214042416

Client 4747 - TRINITY Analysis & Development Corp.	**Transport Method** FEDEX
Profile Number 195817	**Received By** Naquin, Allison Saucier, Charlotte M.
Line Item(s) 1 - Waters	**Receive Date(s)** 04/26/14 04/24/14 04/25/14

CHECKLIST	YES	NO	NA
Were all samples received using proper thermal preservation?	☑	☐	☐
When used, were all custody seals intact?	☑	☐	☐
Were all samples received in proper containers?	☑	☐	☐
Were all samples received using proper chemical preservation?	☑	☐	☐
Was preservative added to any container at the lab?	☐	☑	☐
Were all containers received in good condition?	☑	☐	☐
Were all VOA vials received with no head space?	☐	☑	☐
Do all sample labels match the Chain of Custody?	☑	☐	☐
Did the Chain of Custody list the sampling technician?	☑	☐	☐
Was the COC maintained i.e. all signatures, dates and time of receipt included?	☑	☐	☐

COOLERS

Airbill	Thermometer ID: E22	Temp(°C)
8053 1078 7416		3.4
		2.5
		2.2
8053 1078 7424		3.6
		2.7
8053 1078 7438		1.6
		1.8

DISCREPANCIES

21404241618 - MA02MW001D-a:
Headspace > 6mm (Vial 2 - Unassigned)
Headspace > 6mm (Vial 3 - Unassigned)

LAB PRESERVATIONS

None

NOTES TWO OF THREE VIALS RECEIVED WITH HEADSPACE

May 08, 2014

Service Request No: R1402918

Mr. Sean Hardin
Gulf Coast Analytical Labs
7979 GSRI Avenue
Baton Rouge, LA 70820

Laboratory Results for: Melrose Air Force Range/214042416

Dear Mr. Hardin:

Enclosed are the results of the sample(s) submitted to our laboratory between April 24, 2014 and April 26, 2014. For your reference, these analyses have been assigned our service request number **R1402918**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7473. You may also contact me via email at Deb.Patton@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental

Deb Patton
Project Manager

ADDRESS 1565 Jefferson Rd, Building 300, Suite 360, Rochester, NY 14623 PHONE 585-288-5380 FAX 585-288-8475
ALS GROUP USA, CORP. Part of the ALS Group An ALS Limited Company
Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

CASE NARRATIVE

This report contains analytical results for the following samples:
Service Request Number: R1402918

Lab ID	Client ID
R1402918-001	MA01MW002
R1402918-002	MA01MW003
R1402918-003	MA01MW001
R1402918-004	MA01MW004
R1402918-005	M114MW003
R1402918-006	M114MW002
R1402918-007	M114MW001
R1402918-008	M114MW004
R1402918-009	MWQ-24
R1402918-010	MA02MW001D
R1402918-011	MA02MW001D-a

ALS Environmental

REPORT QUALIFIERS AND DEFINITIONS

U Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.

J Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).

B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.

E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.

E Organics- Concentration has exceeded the calibration range for that specific analysis.

D Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.

* Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.

H Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.

Spike was diluted out.

\+ Correlation coefficient for MSA is <0.995.

N Inorganics- Matrix spike recovery was outside laboratory limits.

N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.

S Concentration has been determined using Method of Standard Additions (MSA).

W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.

P Concentration >40% (25% for CLP) difference between the two GC columns.

C Confirmed by GC/MS

Q DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).

X See Case Narrative for discussion.

MRL Method Reporting Limit. Also known as:
LOQ Limit of Quantitation (LOQ)
The lowest concentration at which the method analyte may be reliably quantified under the method conditions.

MDL Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).

LOD Limit of Detection. A value at or above the MDL which has been verified to be detectable.

ND Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

ACCREDITED IN ACCORDANCE WITH nelac

Rochester Lab ID # for State Certifications[1]

NELAP Accredited	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Connecticut ID # PH0556	Nebraska Accredited	
Delaware Accredited	Nevada ID # NY-00032	North Carolina #676
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047		Virginia #460167

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Gulf Coast Analytical Labs
Project: Melrose Air Force Range/214042416
Sample Matrix: Water

Service Request: R1402918
Date Collected: 4/23/14 - 4/25/14
Date Received: 4/24/14 - 4/26/14

Analysis Method: 218.6 LL

Units: µg/L
Basis: NA

Chromium, Hexavalent, Dissolved

Sample Name	Lab Code	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
MA01MW002	R1402918-001	**1.70**		0.080	0.056	4	NA	5/5/14 18:14	
MA01MW003	R1402918-002	**0.371**		0.020	0.014	1	NA	5/5/14 13:59	
MA01MW001	R1402918-003	**0.327**		0.020	0.014	1	NA	5/5/14 14:08	
MA01MW004	R1402918-004	**0.643**		0.020	0.014	1	NA	5/5/14 14:17	
M114MW003	R1402918-005	**0.828**		0.020	0.014	1	NA	5/5/14 15:16	
M114MW002	R1402918-006	**0.905**		0.020	0.014	1	NA	5/5/14 15:25	
M114MW001	R1402918-007	**0.847**		0.020	0.014	1	NA	5/5/14 15:33	
M114MW004	R1402918-008	**0.808**		0.020	0.014	1	NA	5/5/14 15:42	
MWQ-24	R1402918-009	**0.604**		0.020	0.014	1	NA	5/5/14 15:50	
MA02MW001D	R1402918-010	0.020	U	0.020	0.014	1	NA	5/5/14 15:59	
MA02MW001D-a	R1402918-011	0.020	U	0.020	0.014	1	NA	5/5/14 16:07	
Method Blank	R1402918-MB1	0.020	U	0.020	0.014	1	NA	5/5/14 12:33	
Method Blank	R1402918-MB2	0.020	U	0.020	0.014	1	NA	5/5/14 16:56	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Gulf Coast Analytical Labs
Project: Melrose Air Force Range/214042416
Sample Matrix: Water

Service Request: R1402918
Date Collected: 4/23/14
Date Received: 4/24/14
Date Analyzed: 5/ 5/14

Matrix Spike Summary
General Chemistry Parameters

Sample Name: MA01MW002
Lab Code: R1402918-001

Units: µg/L
Basis: NA

Analytical Method: 218.6 LL

		MA01MW002MS Matrix Spike R1402918-001MS			MA01MW002DMS Duplicate Matrix Spike R1402918-001DMS					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Chromium, Hexavalent, Dissolved	1.70	2.44	0.800	92	2.51	0.800	100	90 - 110	3	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Gulf Coast Analytical Labs
Project: Melrose Air Force Range/214042416
Sample Matrix: Water

Service Request: R1402918
Date Analyzed: 5/ 5/14

Lab Control Sample Summary
General Chemistry Parameters

Units: µg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R1402918-LCS1 Result	Spike Amount	% Rec	% Rec Limits
Chromium, Hexavalent, Dissolved	218.6 LL	0.219	0.200	110	90 - 110

Results flagged with an asterisk (*) indicate values outside control criteria.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Gulf Coast Analytical Labs
Project: Melrose Air Force Range/214042416
Sample Matrix: Water

Service Request: R1402918
Date Analyzed: 5/ 5/14

Lab Control Sample Summary
General Chemistry Parameters

Units: µg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R1402918-LCS2 Result	Spike Amount	% Rec	% Rec Limits
Chromium, Hexavalent, Dissolved	218.6 LL	0.196	0.200	98	90 - 110

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Gulf Coast Analytical Labs
Project: Melrose Air Force Range/214042416

Service Request: R1402918

Continuing Calibration Verification (CCV) Summary
Chromium, Hexavalent, Dissolved

Analytical Method: 218.6 LL

Units: ppb

	Analysis Lot	Lab Code	Date Analyzed	True Value	Measured Value	Percent Recovery	Acceptance Limits
CCV1	391255	RQ1404662-03	5/5/14 12:24	0.500	0.523	105	95 - 105
CCV2	391255	RQ1404662-04	5/5/14 14:59	0.500	0.484	97	95 - 105
CCV3	391255	RQ1404662-05	5/5/14 16:42	0.500	0.511	102	95 - 105
CCV4	391256	RQ1404668-03	5/5/14 16:42	0.500	0.511	102	95 - 105
CCV5	391255	RQ1404662-06	5/5/14 18:31	0.500	0.507	101	95 - 105
CCV6	391256	RQ1404668-04	5/5/14 18:31	0.500	0.507	101	95 - 105
CCV7	391256	RQ1404668-05	5/5/14 18:57	0.500	0.488	98	95 - 105

Client: Gulf Coast Analytical Labs
Project: Melrose Air Force Range/214042416

Service Request: R1402918

Continuing Calibration Blank (CCB) Summary
Chromium, Hexavalent, Dissolved

Analytical Method: 218.6 LL

Units: µg/L

	Analysis Lot	Lab Code	Date Analyzed	MDL	MRL	Result	Q
CCB1	391255	RQ1404662-07	5/5/14 12:33	0.014	0.020	0.020	U
CCB2	391255	RQ1404662-08	5/5/14 15:07	0.014	0.020	0.020	U
CCB3	391255	RQ1404662-09	5/5/14 16:56	0.014	0.020	0.020	U
CCB4	391256	RQ1404668-06	5/5/14 16:56	0.014	0.020	0.020	U
CCB5	391255	RQ1404662-10	5/5/14 18:39	0.014	0.020	0.020	U
CCB6	391256	RQ1404668-07	5/5/14 18:39	0.014	0.020	0.020	U
CCB7	391256	RQ1404668-08	5/5/14 19:06	0.014	0.020	0.020	U

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Page 1 of 1

Project Number: A012-107

Chain of Custody Number (1): 14043002

Project Name / Site Name: Melrose Semi 2014 Sping

Facility: Melrose Air Force Range

Client Name: USACE ABQ

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart (251) 709-6509

Turn Around Time

24 Hour ☐
7 Day ☐
Standard X
Other ☐

Sample Analysis Requested (5) | **Quality Assurance Samples (7)**

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	Sample Code (2)	Sample Number (3)	Sample Matrix (4)	Sample Method (6)	Number of Containers	Chromium (VI) 218.6								Sampler's Initials	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID (Alphabetical Notation)
MA01MW003		23 04 2014	1006		N	1	WG		1	X												B
MA01MW003-MS		23 04 2014	1006		MS	1	WG		1	X												B
MA01MW003-SD		23 04 2014	1006		SD	1	WG		1	X												B
MA01MW003		23 04 2014	1308		N	1	WG		1	X												B
MA01MW001		23 04 2014	1416		N	1	WG		1	X												D
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

Comments:

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time
1.		4-23-14	1700
2.			
3.			

	Received By (Signed)	Date	Time
1.		4/24/14	9:10
2.			
3.			

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:	No	Shipped: No.:	1
Method of Shipment:	FedEx	Airbill Number:	
Analytical Lab:	ALS	Delivery Location:	Rochester, NY
Lab Recipient:		Delivery Date/Time:	

1.) Chain of Custody Number = site name (e.g., SS-125) and then date (yymmdd) collected + custody number (e.g. SS125120720l)...July 20, 2012. (12 Characters Max; No Dashes)

2.) Sample Type Codes: N = Normal Sample, TB = Trip Blank (-t) Sample, FD = Field Duplicate (-d) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-e) Samples, MS = Matrix Spike (-ms), SD = Matrix Spike Duplicate (-sd), AB = Ambient Blank (-a)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-01 on 07/20/12 = 1, if sampled again on 07/20/12 = 2, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Ground Water , WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS= Sulface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ = Soil Blanks

5.) Sample Method Codes: CS = Composite Sample, E2 = Elec. Submersible Pump (1932 +), G = Grab, H = Hollow Stem Auger, PP = Peristaltic Pump, W = Swab or Wipe. (See handout for more methods)

6.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

7.) Quality assurance samples are assigned by date and the number (ddmmyy-xx) of the associated QC sample (01, 02, etc) (E.g., The first equipment blank, trip blank, or ambient blank collected on July 20, 2012 in association with samples on the COC will be designated 200712-01 in the Blank Lot Control Number field).

NOTES: Trip Blanks shall correspond to the first well sampled with VOCs, for example ST069-MW-08S-c. ERPIMS LOCID for TB, EB and AB are designated as FIELDQC samples.

R1402918 5
Gulf Coast Analytical Labs
Melrose Air Force Range

R1402918 5
Gulf Coast Analytical Labs
Melrose Air Force Range

Cooler Receipt and Preservation Check Form

Project/Client _____ Folder Number R14-2918

Cooler received on 4-24-14 by: KE **COURIER:** ALS UPS (FEDEX) VELOCITY CLIENT

1.	Were custody seals on outside of cooler?	(YES)	NO
2.	Were custody papers properly filled out (ink, signed, etc.)?	(YES)	NO
3.	Did all bottles arrive in good condition (unbroken)?	(YES)	NO
4.	Did VOA vials, Alkalinity, or Sulfide have significant* air bubbles?	YES	NO (N/A)
5.	Were **Ice** or **Ice packs** present?	(YES)	NO KE 4-24-14
6.	Where did the bottles originate?	(ALS/ROC, CLIENT)	
7.	Soil VOA samples received as:	Bulk Jar	Encore TerraCore Lab5035set (N/A)
8.	Temperature of cooler(s) upon receipt:	0.5°	

Is the temperature within 0° - 6° C?: (Y) N Y N Y N Y N Y N

If No, Explain Below Date/Time Temperatures Taken: 4-24-14 @ 09:55

Thermometer ID: IR GUN#3 / (IR GUN#4) Reading From: (Temp Blank) / Sample Bottle

If out of Temperature, note packing/ice condition &Client Approval to Run Samples:

All Samples held in storage location SMO R-008 by KE on 4-24-14 at 10:00

5035 samples placed in storage location KE 4-24-14 by _____ on _____ at _____

PC Secondary Review: [signature]

Cooler Breakdown: Date: 4/24/14 Time: 1325 by: [signature]

1.	Were all bottle labels complete (*i.e.* analysis, preservation, etc.)?	(YES)	NO
2.	Did all bottle labels and tags agree with custody papers?	(YES)	NO
3.	Were correct containers used for the tests indicated?	(YES)	NO
4.	Air Samples: Cassettes / Tubes Intact	Canisters Pressurized	Tedlar® Bags Inflated (N/A)

Explain any discrepancies:

pH	Reagent	YES	NO	Lot Received	Exp
≥12	NaOH				
≤2	HNO_3				
≤2	H_2SO_4				
<4	$NaHSO_4$				
Residual Chlorine (-)	For TCN Phenol and 522			If present, contact PM to add ascorbic acid Or sodium sulfite (522)	
	$Na_2S_2O_3$	-	-		
	Zn Aceta	-	-		
	HCl	*	*		

Sample ID	Vol. Added	Lot Added	Final pH

*Not to be tested before analysis – pH tested and recorded by VOAs or GenChem on a separate worksheet

Yes = All samples OK

No = Samples were preserved at lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 12612-2VV

Other Comments:

Cont Buffer : WC1261856 Exp. 3/15

PC Secondary Review: [signature]

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Page 1 of 1
Project Number: A012-107
Chain of Custody Number (1): 14042403

Project Name / Site Name: Melrose Semi 2014 Sping	Turn Around Time	
Facility: Melrose Air Force Range	24 Hour	☐
Client Name: USACE ABQ	7 Day	☐
Project Manager: Jonathan Kramer	Standard	X
Collected by: Benjamin Stewart (251) 709-6509	Other	☐

Sample Analysis Requested (6) / Quality Assurance Samples (7)

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	Sample Code (2)	Sample Number (3)	Sample Matrix (4)	Sample Method (5)	Number of Containers	Chromium (VI) 218.6	Sampler's Initials	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Coder ID (Alphabetical Notation)
MA01MW004		24042014	1010		N	1	WG		1	X					B
M114MW003		24042014	1200		N	1	WG		1	X					B
M114MW002		24042014	1308		N	1	WG		1	X					B
M114MW001		24042014	1430		N	1	WG		1	X					B

Comments:

Custody Transfers Prior to Receipt by Laboratory

Relinquished by (Signed)	Date	Time	Received by (Signed)	Date	Time
1. [signature]	4/24/14	1700	1. [signature]	4/25/14	0940
2.			2.		
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:	WG	Shipped: No.:	1
Method of Shipment:	FedEx	Airbill Number:	
Analytical Lab:	ALS Environmental	Delivery Location:	Rochester, NY
Lab Recipient:		Delivery Date/Time:	

1.) Chain of Custody Number = site name (e.g., SS-125) and then date (yymmdd) collected + custody number (e.g. SS1251207201)...July 20, 2012. (12 Characters Max; No Dashes)
2.) Sample Type Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike (-ms), SD = Matrix Spike Duplicate (-sd), AB = Ambient Blank (-e)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-01 on 07/20/12 = 1, if sampled again on 07/20/12 = 2, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Ground Water, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Suface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ = Soil Blanks
5.) Sample Method Codes: CS = Composite Sample, E2 = Elec. Submersible Pump (1982 +), G = Grab, H = Hollow Stem Auger, PP = Peristaltic Pump, W = Swab or Wipe. (See handout for more methods)
6.) Sample Analysis Requested. Analytical method requested and number of containers provided for each.
7.) Quality assurance samples are assigned by date and the number (ddmmyynn) of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or ambient blank collected on July 20, 2012 in association with samples on the COC will be designated 20071201 in the Blank Lot Control Number field).

NOTES: Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c. ERPIMS LOCID for TB, EB and AB are designated as FIELDQC samples.

0012

R1402918 5
Gulf Coast Analytical Labs
Melrose Air Force Range

R1402918 5
Gulf Coast Analytical Labs
Melrose Air Force Range

Cooler Receipt and Preservation Check Form

Project/Client _____ Folder Number 2N1-2918

Cooler received on 4/25/14 by: JPS **COURIER:** ALS UPS (FEDEX) VELOCITY CLIENT

1. Were custody seals on outside of cooler? (YES) NO
2. Were custody papers properly filled out (ink, signed, etc.)? (YES) NO
3. Did all bottles arrive in good condition (unbroken)? (YES) NO
4. Did VOA vials, Alkalinity, or Sulfide have significant* air bubbles? YES NO (N/A)
5. Were **Ice** or **Ice packs** present? (YES) NO
6. Where did the bottles originate? ALS/ROC, (CLIENT)
7. Soil VOA samples received as: Bulk Jar Encore TerraCore Lab5035set (N/A)
8. Temperature of cooler(s) upon receipt: 2.7

Is the temperature within 0° - 6° C?: (Y) N Y N Y N Y N Y N

If No, Explain Below Date/Time Temperatures Taken: 4/25/14 0947

Thermometer ID: (IR GUN#3) / IR GUN#4 Reading From: (Temp Blank) / Sample Bottle

If out of Temperature, note packing/ice condition &Client Approval to Run Samples: _____

All Samples held in storage location 2012 by JPS on 4/25 at 0945
5035 samples placed in storage location _____ by _____ on _____ at _____

PC Secondary Review: (JPS)

Cooler Breakdown: Date: 4/25/14 Time: 1605 by: JPS

1. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? (YES) NO
2. Did all bottle labels and tags agree with custody papers? (YES) NO
3. Were correct containers used for the tests indicated? (YES) NO
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated (N/A)

Explain any discrepancies: _____

pH	Reagent	YES	NO	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3								
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For TCN Phenol and 522			If present, contact PM to add ascorbic acid Or sodium sulfite (522)					
	$Na_2S_2O_3$	-	-						
	Zn Aceta	-	-						
	HCl	*	*						

*Not to be tested before analysis – pH tested and recorded by VOAs or GenChem on a separate worksheet

Yes = All samples OK

No = Samples were preserved at lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 112612-2W

Other Comments:

PC Secondary Review: _____

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

TRINITY ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Page 1 of 1

Project Number: A012-107

Chain of Custody Number (1): 14042502

Project Name / Site Name: Melrose Semi 2014 Sping	
Facility: Melrose Air Force Range	
Client Name: USACE ABQ	
Project Manager: Jonathan Kramer	
Collected by: Benjamin Stewart (251) 709-6509	

Turn Around Time

24 Hour	☐
7 Day	☐
Standard	X
Other	☐

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	Sample Code (2)	Sample Number (3)	Sample Matrix (4)	Sample Method (5)	Number of Containers	Chromium (VI) 218.6								Sampler's Initials	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Coder ID (Alphabetical Notation)
M114MW004		25042014	0925		N	1	WG		1	X												C
MW9-24		25042014	1100		N	1	WG		1	X												C
MA02MW001D		25042014	1252		N	1	WG		1	X												C
MA02MW001D-a		25042014	1252		FD	1	WG		1	X												C
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

Comments:

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time
1.		4/25/14	1600
2.			
3.			

	Received by (Signed)	Date	Time
1.			
2.			
3.		4-26-14	10:05

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:	No	Shipped: No.:	1
Method of Shipment:	FedEx	Airbill Number:	
Analytical Lab:	ALS Environmental	Delivery Location:	Rochester, NY
Lab Recipient:		Delivery Date/Time:	

1.) Chain of Custody Number = site name (e.g., SS-125) and then date (yymmdd) collected + custody number (e.g. SS1251207201)...July 20, 2012 (12 Characters Max; No Dashes)

2.) Sample Type Codes: N = Normal Sample, TB = Trip Blank (-t) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike (-ms), SD = Matrix Spike Duplicate (-sd), AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day: (e.g. Groundwater sample collected from MW-01 on 07/20/12 = 1, if sampled again on 07/20/12 = 2, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Ground Water, WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS = Suface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ = Soil Blanks

5.) Sample Method Codes: CS = Composite Sample, E2 = Elec. Submersible Pump (1982 +), G = Grab, H = Hollow Stem Auger, PP = Peristaltic Pump, W = Swab or Wipe. (See handout for more methods)

6.) Sample Analysis Requested: Analytical method requested and number of containers provided for each

7.) Quality assurance samples are assigned by date and the number (dd/mm/yyyy) of the associated QC sample (01, 02, etc) (E.g., The first equipment blank, trip blank, or ambient blank collected on July 20, 2012 in association with samples on the COC will be designated 20071201 in the Blank Lot Control Number field)

NOTES: Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c. ERPIMS LOCID for TB, EB and AB are designated as FIELDQC samples

R1402918 5
Gulf Coast Analytical Labs
Melrose Air Force Range

R1402918 5
Gulf Coast Analytical Labs
Melrose Air Force Range

Cooler Receipt and Preservation Check Form

Project/Client GCAL Folder Number NM - 2918

Cooler received on 4-26-14 by: HE COURIER: ALS UPS (FEDEX) VELOCITY CLIENT

1.	Were custody seals on outside of cooler?	(YES)	NO
2.	Were custody papers properly filled out (ink, signed, etc.)?	(YES)	NO
3.	Did all bottles arrive in good condition (unbroken)?	(YES)	NO
4.	Did VOA vials, Alkalinity, or Sulfide have significant* air bubbles?	YES	NO (N/A)
5.	Were **Ice** or **Ice packs** present?	(YES)	NO
6.	Where did the bottles originate?	(ALS/ROC), CLIENT	
7.	Soil VOA samples received as:	Bulk Jar	Encore TerraCore Lab5035set (N/A)
8.	Temperature of cooler(s) upon receipt:	1.4°	

Is the temperature within 0° - 6° C?: (Y) N Y N Y N Y N Y N

If No, Explain Below Date/Time Temperatures Taken: 4-26-14 @ 1017

Thermometer ID: (IR GUN#3) / IR GUN#4 Reading From: Temp Blank / (Sample Bottle)

If out of Temperature, note packing/ice condition &Client Approval to Run Samples:

All Samples held in storage location SMO R-007 by HE on 4-26-14 at 1021

5035 samples placed in storage location HE 4/26/14 by _____ on _____ at _____

PC Secondary Review:

Cooler Breakdown: Date: 4/28/14 Time: 1501 by: UPS

1.	Were all bottle labels complete (*i.e.* analysis, preservation, etc.)?	(YES)	NO
2.	Did all bottle labels and tags agree with custody papers?	(YES)	NO
3.	Were correct containers used for the tests indicated?	(YES)	NO
4.	Air Samples: Cassettes / Tubes Intact	Canisters Pressurized	Tedlar® Bags Inflated (N/A)

Explain any discrepancies:

pH	Reagent	YES	NO	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3								
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For TCN Phenol and 522			If present, contact PM to add ascorbic acid Or sodium sulfite (522)					
	$Na_2S_2O_3$	-	-						
	Zn Aceta	-	-						
	HCl	*	*						

*Not to be tested before analysis – pH tested and recorded by VOAs or GenChem on a separate worksheet

Yes = All samples OK

No = Samples were preserved at lab as listed

PM OK to Adjust: _____

Bottle lot numbers: client

Other Comments:

PC Secondary Review: _____

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

May 16, 2014

Sean Hardin
GCAL LAB
7979 GSRI AVENUE
BATON ROUGE, LA 70820
TEL: (225) 769-4900
FAX (225) 767-5717

Order No.: 1404319

RE: Melrose

Dear Sean Hardin:

DHL Analytical, Inc. received 11 sample(s) on 4/29/2014 for the analyses presented in the following report.

There were no problems with the analyses and all data met requirements of DoD QSM Ver 4.2 and NELAC except where noted in the Case Narrative. All non-NELAC methods will be identified accordingly in the case narrative and all estimated uncertainties of test results are within method or EPA specifications.

If you have any questions regarding these tests results, please feel free to call. This report shall not be reproduced except in full without the written approval of DHL Analytical, Inc. Thank you for using DHL Analytical.

Sincerely,

John DuPont
General Manager

This report was performed under the accreditation of the State of Texas & DoD Laboratory Certification Number: T104704211-14-12 & DoD-ELAP #L14-26

Table of Contents

Miscellaneous Documents **3**

CaseNarrative 1404319 ..... **10**

WorkOrderSampleSummary 1404319 ..... **11**

PrepDatesReport 1404319 ..... **12**

AnalyticalDatesReport 1404319 ..... **13**

Analytical Report 1404319 ..... **14**

AnalyticalQCSummaryReport 1404319 ..... **25**

Sequence Report 1404319 ..... **29**

GCAL

GULF COAST ANALYTICAL LABORATORIES, INC
7979 GSRI AVE, BATON ROUGE LA 70820-7402
(225) 769-4900 FAX (225) 767-5717

Chain of Custody Record

#1404319

Submitted by	Bill to
Client: Gulf Coast Analytical Labs	Client: Gulf Coast Analytical Labs
Address: 7979 GSRI Avenue	Address: 7979 GSRI Avenue
Baton Rouge, LA 70820	Baton Rouge, LA 70820
Contact: Sean Hardin	Contact: Sean Hardin
Phone: (225)769-4900	Phone: (225)769-4900
Fax: (225)767-5717	Fax: (225)767-5717

P.O. Number: 14-0318

Project Name/Number: Melrose

Sampled By:

* Our P. O. Number must appear on the Invoice.

* Our Project Number must appear on the final report.

	Matrix	Date	Time (2400)	Comp	Grab	Sample Description	Preservatives	No. Containers	PERCHLORATE (6860)	Remarks:	Lab ID
01	W	4/23/2014	10:06			MA01MW002		1	X		
07	W	4/23/2014	10:06			MA01MW002-MS		1	X		
01	W	4/23/2014	10:06			MA01MW002-MSD		1	X		
02	W	4/23/2014	13:08			MA01MW003		1	X		
03	W	4/23/2014	14:16			MA01MW001		1	X		
01	W	4/24/2014	10:10			MA01MW004		1	X		
05	W	4/24/2014	12:00			M114MW003		1	X		
04	W	4/24/2014	13:08			M114MW002		1	X		
07	W	4/24/2014	14:30			M114MW001		1	X		
06	W	4/25/2014	9:25			M114MW004		1	X		

Turn Around Time: ___ 24 - 48 hrs ___ 3 days ___ 1 week X standard other ___

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
[signature]	[signature]	4/28/14	1700
[signature]	[signature]	4/29/14	945

Note: Rec temp 3.7 Therm #37

Please fax results to (225)767-5717 Custody Seal UNBROKEN

PLEASE RETURN ICE CHESTS TO 7979 GSRI AVE.

Matrix: W = water, S=Soil, SD=Solid, L=Liquid, SL=Sludge, O=Oil, CT=Charcoal Tube, OVM=Organic Vapor Monitor, XT=XAD Tube, A=Air Bag, SUM=Summa Canister

GCAL

GULF COAST ANALYTICAL LABORATORIES, INC
7979 GSRI AVE, BATON ROUGE LA 70820-7402
(225) 769-4900 FAX (225) 767-5717

A1404317

Chain of Custody Record

Submitted by	Bill to
Client: Gulf Coast Analytical Labs	Client: Gulf Coast Analytical Labs
Address: 7979 GSRI Avenue	Address: 7979 GSRI Avenue
Baton Rouge, LA 70820	Baton Rouge, LA 70820
Contact: Sean Hardin	Contact: Sean Hardin
Phone: (225)769-4900	Phone: (225)769-4900
Fax: (225)767-5717	Fax: (225)767-5717

* Our P. O. Number must appear on the Invoice.

* Our Project Number must appear on the final report.

P.O. Number: 14-0318

Project Name/Number: Melrose

Sampled By:

Matrix	Date	Time (2400)	Comp	Grab	Sample Description	Pre-servatives	No. Containers	PERCHLORATE (6860)	Remarks:	Lab ID
W	4/25/2014	11:00			MWQ-24		1	X		
W	4/25/2014	12:52			MA02MW001D		1	X		
W	4/25/2014	12:52			MA02MW001D-a		1	X		
W										
W										
W										
W										
W										
W										
W										

04 C 4

Turn Around Time: ___ 24 - 48 hrs ___ 3 days 1 week X standard other ___

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date: 4/28/14	Time: 1700
Relinquished by: (Signature)	Received by: (Signature)	Date: 4/29/14	Time: 945
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Note:

Please fax results to (225)767-5717

PLEASE RETURN ICE CHESTS TO 7979 GSRI AVE.

Matrix: W = water, S=Soil, SD=Solid, L=Liquid, SL=Sludge, O=Oil, CT=Charcoal Tube, OVM=Organic Vapor Monitor, XT=XAD Tube, A=Air Bag, SUM=Summa Canister

GCAL
ANALYTICAL LABORATORIES, LLC
CUSTODY SEAL
Date Sealed: 4-28-14
Sealed By: JBH
GCAL-17
Confirms to the conditions specified in 49 CFR 173.4
Package Orientation

ORIGIN ID:OPLA (225) 769-4900
CHARLOTTE SAUCIER
GULF COAST ANALYTICAL LABS INC
7979 INNOVATION DR
BATON ROUGE, LA 70820
UNITED STATES US
SHIP DATE: 28APR14
ACTWGT: 15.0 LB MAN
CAD: 0291381/CAFE2704
BILL SENDER
TO SAMPLE RECEIVING
DHL
2300 DOUBLE CREEK DRIVE
ROUND ROCK TX 78664
(612) 388-8222
REF:
DEPT:
FedEx Express
TUE - 29 APR 10:30A
PRIORITY OVERNIGHT
TRK# 5980 9378 0750
0201
XH BSMA
78664
TX-US AUS

DHL Analytical, Inc.

Sample Receipt Checklist

Client Name GCAL LAB

Date Received: 4/29/2014

Work Order Number 1404319

Received by JB

Checklist completed by: _____ 4/29/2014
Signature | Date

Reviewed by: DL 4/29/2014
Initials | Date

Carrier name FedEx 1day

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	3.7 °C
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH<2 acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted? _____		Checked by _____
Water - ph>9 (S) or ph>12 (CN) acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted? _____		Checked by _____

Any No response must be detailed in the comments section below.

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

DHL Analytical, Inc.

Laboratory Review Checklist: Reportable Data

Project Name: Melrose	**Date: 5/16/2014**
Reviewer Name: Angie O'Donnell	**Laboratory Work Order: 1404319**
Prep Batch Number(s): See Prep Dates Report	**Run Batch:** See Analytical Dates Report

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Chain-of-Custody (C-O-C)					
R1	OI	**1)** Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	**X**				**R1-01**
		2) Were all departures from standard conditions described in an exception report?			**X**		
R2	OI	**Sample and Quality Control (QC) Identification**					
		1) Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	**X**				
		2) Are all laboratory ID numbers cross-referenced to the corresponding QC data?	**X**				
R3	OI	**Test Reports**					
		1) Were all samples prepared and analyzed within holding times?	**X**				
		2) Other than those results < MQL, were all other raw values bracketed by calibration standards?	**X**				
		3) Were calculations checked by a peer or supervisor?	**X**				
		4) Were all analyte identifications checked by a peer or supervisor?	**X**				
		5) Were sample quantitation limits reported for all analytes not detected?	**X**				
		6) Were all results for soil and sediment samples reported on a dry weight basis?			**X**		
		7) Were % moisture (or solids) reported for all soil and sediment samples?			**X**		
		8) If required for the project, TICs reported?			**X**		
R4	O	**Surrogate Recovery Data**					
		1) Were surrogates added prior to extraction?			**X**		
		2) Were surrogate percent recoveries in all samples within the laboratory QC limits?			**X**		
R5	OI	**Test Reports/Summary Forms for Blank Samples**					
		1) Were appropriate type(s) of blanks analyzed?	**X**				
		2) Were blanks analyzed at the appropriate frequency?	**X**				
		3) Where method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	**X**				
		4) Were blank concentrations < MQL?	**X**				
R6	OI	**Laboratory Control Samples (LCS):**					
		1) Were all COCs included in the LCS?	**X**				
		2) Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	**X**				
		3) Were LCSs analyzed at the required frequency?	**X**				
		4) Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	**X**				
		5) Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	**X**				
		6) Was the LCSD RPD within QC limits (if applicable)?	**X**				
R7	OI	**Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Data**					
		1) Were the project/method specified analytes included in the MS and MSD?	**X**				
		2) Were MS/MSD analyzed at the appropriate frequency?	**X**				
		3) Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		**X**			**R7-03**
		4) Were MS/MSD RPDs within laboratory QC limits?	**X**				
R8	OI	**Analytical Duplicate Data**					
		1) Were appropriate analytical duplicates analyzed for each matrix?			**X**		
		2) Were analytical duplicates analyzed at the appropriate frequency?			**X**		
		3) Were RPDs or relative standard deviations within the laboratory QC limits?			**X**		
R9	OI	**Method Quantitation Limits (MQLs):**					
		1) Are the MQLs for each method analyte included in the laboratory data package?	**X**				
		2) Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	**X**				
		3) Are unadjusted MQLs included in the laboratory data package?	**X**				
R10	OI	**Other Problems/Anomalies**					
		1) Are all known problems/anomalies/special conditions noted in this LRC and ER?	**X**				
		2) Were all necessary corrective actions performed for the reported data?	**X**				
		3) Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	**X**				

1 Items identified by the letter "R" should be included in the laboratory data package submitted to the TCEQ in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).
3 NA = Not applicable.
4 NR = Not Reviewed.
5 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

DHL Analytical, Inc.
Laboratory Review Checklist (continued): Supporting Data

Project Name: Melrose	**Date: 5/16/2014**
Reviewer Name: Angie O'Donnell	**Laboratory Work Order: 1404319**

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial Calibration (ICAL)**					
		1) Were response factors and/or relative response factors for each analyte within QC limits?	**X**				
		2) Were percent RSDs or correlation coefficient criteria met?	**X**				
		3) Was the number of standards recommended in the method used for all analytes?	**X**				
		4) Were all points generated between the lowest and highest standard used to calculate the curve?	**X**				
		5) Are ICAL data available for all instruments used?	**X**				
		6) Has the initial calibration curve been verified using an appropriate second source standard?	**X**				
S2	OI	**Initial and Continuing calibration Verification (ICCV and CCV) and Continuing Calibration blank (CCB)**					
		1) Was the CCV analyzed at the method-required frequency?	**X**				
		2) Were percent differences for each analyte within the method-required QC limits?		**X**			**S2-02**
		3) Was the ICAL curve verified for each analyte?	**X**				
		4) Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			**X**		
S3	O	**Mass Spectral Tuning**					
		1) Was the appropriate compound for the method used for tuning?	**X**				
		2) Were ion abundance data within the method-required QC limits?	**X**				
S4	O	**Internal Standards (IS)**					
		1) Were IS area counts and retention times within the method-required QC limits?	**X**				
S5	OI	**Raw Data (NELAC section 1 appendix A glossary, and section 5.12)**					
		1) Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	**X**				
		2) Were data associated with manual integrations flagged on the raw data?	**X**				
S6	O	**Dual Column Confirmation**					
		1) Did dual column confirmation results meet the method-required QC?			**X**		
S7	O	**Tentatively Identified Compounds (TICs)**					
		1) If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			**X**		
S8	I	**Interference Check Sample (ICS) Results**					
		1) Were percent recoveries within method QC limits?			**X**		
S9	I	**Serial Dilutions, Post Digestion Spikes, and Method of Standard Additions**					
		1) Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			**X**		
S10	OI	**Method Detection Limit (MDL) Studies**					
		1) Was a MDL study performed for each reported analyte?	**X**				
		2) Is the MDL either adjusted or supported by the analysis of DCSs?	**X**				
S11	OI	**Proficiency Test Reports**					
		1) Was the lab's performance acceptable on the applicable proficiency tests or evaluation studies?	**X**				
S12	OI	**Standards Documentation**					
		1) Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	**X**				
S13	OI	**Compound/Analyte Identification Procedures**					
		1) Are the procedures for compound/analyte identification documented?	**X**				
S14	OI	**Demonstration of Analyst Competency (DOC)**					
		1) Was DOC conducted consistent with NELAC Chapter 5C?	**X**				
		2) Is documentation of the analyst's competency up-to-date and on file?	**X**				
S15	OI	**Verification/Validation Documentation for Methods (NELAC Chap 5)**					
		1) Are all the methods used to generate the data documented, verified, and validated, where applicable?	**X**				
S16	OI	**Laboratory Standard Operating Procedures (SOPs)**					
		1) Are laboratory SOPs current and on file for each method performed?	**X**				

1 Items identified by the letter "R" should be included in the laboratory data package submitted to the TCEQ in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).
3 NA = Not applicable.
4 NR = Not Reviewed.
5 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Data Package Signature Page

This data package consists of:

This signature page, the laboratory review checklist, and the following reportable data:

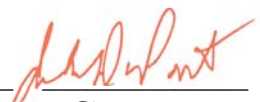
- R1 Field chain-of-custody documentation;
- R2 Sample identification cross-reference;
- R3 Test reports (analytical data sheets) for each environmental sample that includes:
  a) Items consistent with NELAC 5.13
  b) dilution factors,
  c) preparation methods,
  d) cleanup methods, and
  e) if required for the project, tentatively identified compounds (TICs).
- R4 Surrogate recovery data including:
  a) Calculated recovery (%R), and
  b) The laboratory's surrogate QC limits.
- R5 Test reports/summary forms for blank samples;
- R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  a) LCS spiking amounts,
  b) Calculated %R for each analyte, and
  c) The laboratory's LCS QC limits.
- R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a) Samples associated with the MS/MSD clearly identified,
  b) MS/MSD spiking amounts,
  c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d) Calculated %Rs and relative percent differences (RPDs), and
  e) The laboratory's MS/MSD QC limits
- R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  a) the amount of analyte measured in the duplicate,
  b) the calculated RPD, and
  c) the laboratory's QC limits for analytical duplicates.
- R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;
- R10 Other problems or anomalies.

The Exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

Release Statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

John DuPont – General Manager

Scott Schroeder – Technical Director



Signature

05/16/14

Date

DHL Analytical, Inc. **Date:** *16-May-14*

CLIENT: GCAL LAB
Project: Melrose
Lab Order: 1404319

CASE NARRATIVE

This case narrative describes abnormalities and deviations that may affect the results and summarizes all known issues that need to be highlighted for the data user to assess the results. This case narrative and the report contents are compliant with DoD QSM Ver 4.2 and NELAC. The "U" flag , in the Analytical Report, indicates the results for that sample are nondetect.

Samples were analyzed using the methods outlined in the following references:

Method SW6860 - Perchlorate Analysis (Parameter is ELAP Accredited but not NELAC Certified)

Exception Report R1-01

The samples were received on and log-in performed on 4/29/2014. A total of 11 samples were received and analyzed. The samples arrived in good condition and were properly packaged.

Exception Report R7-03

For Perchlorate Analysis, performed on 5/13/2014, the recoveries of the Matrix Spike and Matrix Spike Duplicate (140439-01 MS/MSD) were above the method control limits. These are flagged accordingly in the QC Summary report. The associated LCS was within method control limits. The reference sample selected for the matrix spike and matrix spike duplicate was from this workorder. No further corrective action was taken.

Exception Report S2-02

For Perchlorate Analysis, performed on 5/13/2014, the response factor of Internal Standard Perchlorate_107 for the Low Level Calibration Verification (LCVL1-140514, LCVL2-140513) were above the method control limits. These are flagged accordingly in the QC Summary report. The recoveries of Perchlorate for these QC samples were within method control limits. No further corrective action was taken.

A summary of project communication follows:

Request for quote was sent to DHL Analytical from the client, via email on 5/5/11 and the quote was sent to client via email on 5/5/11. Email for work approved by both parties on 5/18/11 with P.O number 12-0969.

Client sent samples in own containers. This sample delivery group arrived at DHL Analytical 4/29/2014.

DHL Analytical, Inc.

Date: *16-May-14*

CLIENT: GCAL LAB
Project: Melrose
Lab Order: 1404319

Work Order Sample Summary

Lab Smp ID	Client Sample ID	Tag Number	Date Collected	Date Recved
1404319-01	MA01MW002		04/23/14 10:06 AM	4/29/2014
1404319-02	MA01MW003		04/23/14 01:08 PM	4/29/2014
1404319-03	MA01MW001		04/23/14 02:16 PM	4/29/2014
1404319-04	MA01MW004		04/24/14 10:10 AM	4/29/2014
1404319-05	M114MW003		04/24/14 12:00 PM	4/29/2014
1404319-06	M114MW002		04/24/14 01:08 PM	4/29/2014
1404319-07	M114MW001		04/24/14 02:30 PM	4/29/2014
1404319-08	M114MW004		04/25/14 09:25 AM	4/29/2014
1404319-09	MWQ-24		04/25/14 11:00 AM	4/29/2014
1404319-10	MA02MW001D		04/25/14 12:52 PM	4/29/2014
1404319-11	MA02MW001D-a		04/25/14 12:52 PM	4/29/2014

Lab Order: 1404319
Client: GCAL LAB
Project: Melrose

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1404319-01A	MA01MW002	04/23/14 10:06 AM	Aqueous	SW6860	Perchlorate Prep	05/13/14 01:01 PM	63496
1404319-02A	MA01MW003	04/23/14 01:08 PM	Aqueous	SW6860	Perchlorate Prep	05/13/14 01:01 PM	63496
1404319-03A	MA01MW001	04/23/14 02:16 PM	Aqueous	SW6860	Perchlorate Prep	05/13/14 01:01 PM	63496
1404319-04A	MA01MW004	04/24/14 10:10 AM	Aqueous	SW6860	Perchlorate Prep	05/13/14 01:01 PM	63496
1404319-05A	M114MW003	04/24/14 12:00 PM	Aqueous	SW6860	Perchlorate Prep	05/13/14 01:01 PM	63496
	M114MW003	04/24/14 12:00 PM	Aqueous	SW6860	Perchlorate Prep	05/13/14 01:01 PM	63496
1404319-06A	M114MW002	04/24/14 01:08 PM	Aqueous	SW6860	Perchlorate Prep	05/13/14 01:01 PM	63496
1404319-07A	M114MW001	04/24/14 02:30 PM	Aqueous	SW6860	Perchlorate Prep	05/13/14 01:01 PM	63496
1404319-08A	M114MW004	04/25/14 09:25 AM	Aqueous	SW6860	Perchlorate Prep	05/13/14 01:01 PM	63496
1404319-09A	MWQ-24	04/25/14 11:00 AM	Aqueous	SW6860	Perchlorate Prep	05/13/14 01:01 PM	63496
1404319-10A	MA02MW001D	04/25/14 12:52 PM	Aqueous	SW6860	Perchlorate Prep	05/13/14 01:01 PM	63496
	MA02MW001D	04/25/14 12:52 PM	Aqueous	SW6860	Perchlorate Prep	05/13/14 01:01 PM	63496
1404319-11A	MA02MW001D-a	04/25/14 12:52 PM	Aqueous	SW6860	Perchlorate Prep	05/13/14 01:01 PM	63496
	MA02MW001D-a	04/25/14 12:52 PM	Aqueous	SW6860	Perchlorate Prep	05/13/14 01:01 PM	63496

Lab Order: 1404319
Client: GCAL LAB
Project: Melrose

ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1404319-01A	MA01MW002	Aqueous	SW6860	Perchlorate - Water	63496	1	05/13/14 06:03 PM	ICMS2_140513B
1404319-02A	MA01MW003	Aqueous	SW6860	Perchlorate - Water	63496	1	05/13/14 06:51 PM	ICMS2_140513B
1404319-03A	MA01MW001	Aqueous	SW6860	Perchlorate - Water	63496	1	05/13/14 07:07 PM	ICMS2_140513B
1404319-04A	MA01MW004	Aqueous	SW6860	Perchlorate - Water	63496	1	05/13/14 07:23 PM	ICMS2_140513B
1404319-05A	M114MW003	Aqueous	SW6860	Perchlorate - Water	63496	1	05/14/14 11:45 AM	ICMS2_140513B
	M114MW003	Aqueous	SW6860	Perchlorate - Water	63496	1	05/13/14 07:39 PM	ICMS2_140513B
1404319-06A	M114MW002	Aqueous	SW6860	Perchlorate - Water	63496	1	05/13/14 07:55 PM	ICMS2_140513B
1404319-07A	M114MW001	Aqueous	SW6860	Perchlorate - Water	63496	1	05/13/14 08:11 PM	ICMS2_140513B
1404319-08A	M114MW004	Aqueous	SW6860	Perchlorate - Water	63496	1	05/13/14 08:27 PM	ICMS2_140513B
1404319-09A	MWQ-24	Aqueous	SW6860	Perchlorate - Water	63496	1	05/13/14 08:44 PM	ICMS2_140513B
1404319-10A	MA02MW001D	Aqueous	SW6860	Perchlorate - Water	63496	1	05/14/14 12:01 PM	ICMS2_140513B
	MA02MW001D	Aqueous	SW6860	Perchlorate - Water	63496	1	05/13/14 09:00 PM	ICMS2_140513B
1404319-11A	MA02MW001D-a	Aqueous	SW6860	Perchlorate - Water	63496	1	05/14/14 12:17 PM	ICMS2_140513B
	MA02MW001D-a	Aqueous	SW6860	Perchlorate - Water	63496	1	05/13/14 10:04 PM	ICMS2_140513B

DHL Analytical, Inc.

Date: *16-May-14*

CLIENT:	GCAL LAB	**Client Sample ID:**	MA01MW002
Project:	Melrose	**Lab ID:**	1404319-01
Project No:		**Collection Date:**	04/23/14 10:06 AM
Lab Order:	1404319	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PERCHLORATE - WATER		**SW6860**					Analyst: **AS**
Perchlorate	0.00142	0.000100	0.000300	N	mg/L	1	05/13/14 06:03 PM
IS: Perchlorate_107	140	0	50-150	N	%REC	1	05/13/14 06:03 PM

Qualifiers:

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

DHL Analytical, Inc.

Date: *16-May-14*

CLIENT:	GCAL LAB	**Client Sample ID:**	MA01MW003
Project:	Melrose	**Lab ID:**	1404319-02
Project No:		**Collection Date:**	04/23/14 01:08 PM
Lab Order:	1404319	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PERCHLORATE - WATER		**SW6860**					Analyst: **AS**
Perchlorate	0.000200	0.000100	0.000300	JN	mg/L	1	05/13/14 06:51 PM
IS: Perchlorate_107	132	0	50-150	N	%REC	1	05/13/14 06:51 PM

Qualifiers:

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

DHL Analytical, Inc.

Date: *16-May-14*

CLIENT:	GCAL LAB	**Client Sample ID:**	MA01MW001
Project:	Melrose	**Lab ID:**	1404319-03
Project No:		**Collection Date:**	04/23/14 02:16 PM
Lab Order:	1404319	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PERCHLORATE - WATER		**SW6860**					Analyst: **AS**
Perchlorate	0.000174	0.000100	0.000300	JN	mg/L	1	05/13/14 07:07 PM
IS: Perchlorate_107	131	0	50-150	N	%REC	1	05/13/14 07:07 PM

Qualifiers:

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

DHL Analytical, Inc.

Date: *16-May-14*

CLIENT:	GCAL LAB	**Client Sample ID:**	MA01MW004
Project:	Melrose	**Lab ID:**	1404319-04
Project No:		**Collection Date:**	04/24/14 10:10 AM
Lab Order:	1404319	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PERCHLORATE - WATER		**SW6860**					Analyst: **AS**
Perchlorate	0.00238	0.000100	0.000300	N	mg/L	1	05/13/14 07:23 PM
IS: Perchlorate_107	125	0	50-150	N	%REC	1	05/13/14 07:23 PM

Qualifiers:	*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
	C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
	E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
	MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
	RL	Reporting Limit	S	Spike Recovery outside control limits
	N	Parameter not NELAC certified		

DHL Analytical, Inc.

Date: *16-May-14*

CLIENT:	GCAL LAB	**Client Sample ID:**	M114MW003
Project:	Melrose	**Lab ID:**	1404319-05
Project No:		**Collection Date:**	04/24/14 12:00 PM
Lab Order:	1404319	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PERCHLORATE - WATER		**SW6860**					Analyst: **AS**
Perchlorate	0.00227	0.000100	0.000300	N	mg/L	1	05/14/14 11:45 AM
IS: Perchlorate_107	75.8	0	50-150	N	%REC	1	05/14/14 11:45 AM

Qualifiers:

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

DHL Analytical, Inc.

Date: *16-May-14*

CLIENT:	GCAL LAB	**Client Sample ID:**	M114MW002
Project:	Melrose	**Lab ID:**	1404319-06
Project No:		**Collection Date:**	04/24/14 01:08 PM
Lab Order:	1404319	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PERCHLORATE - WATER		**SW6860**					Analyst: **AS**
Perchlorate	0.00139	0.000100	0.000300	N	mg/L	1	05/13/14 07:55 PM
IS: Perchlorate_107	95.3	0	50-150	N	%REC	1	05/13/14 07:55 PM

Qualifiers:

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

DHL Analytical, Inc.

Date: *16-May-14*

CLIENT:	GCAL LAB	**Client Sample ID:**	M114MW001
Project:	Melrose	**Lab ID:**	1404319-07
Project No:		**Collection Date:**	04/24/14 02:30 PM
Lab Order:	1404319	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PERCHLORATE - WATER		**SW6860**					Analyst: **AS**
Perchlorate	0.00193	0.000100	0.000300	N	mg/L	1	05/13/14 08:11 PM
IS: Perchlorate_107	86.5	0	50-150	N	%REC	1	05/13/14 08:11 PM

Qualifiers:	*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
	C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
	E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
	MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
	RL	Reporting Limit	S	Spike Recovery outside control limits
	N	Parameter not NELAC certified		

CLIENT:	GCAL LAB	**Client Sample ID:**	M114MW004
Project:	Melrose	**Lab ID:**	1404319-08
Project No:		**Collection Date:**	04/25/14 09:25 AM
Lab Order:	1404319	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PERCHLORATE - WATER		**SW6860**					Analyst: **AS**
Perchlorate	0.00149	0.000100	0.000300	N	mg/L	1	05/13/14 08:27 PM
IS: Perchlorate_107	82.7	0	50-150	N	%REC	1	05/13/14 08:27 PM

Qualifiers:

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

DHL Analytical, Inc.

Date: *16-May-14*

CLIENT:	GCAL LAB	**Client Sample ID:**	MWQ-24
Project:	Melrose	**Lab ID:**	1404319-09
Project No:		**Collection Date:**	04/25/14 11:00 AM
Lab Order:	1404319	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PERCHLORATE - WATER		**SW6860**					Analyst: **AS**
Perchlorate	0.000100	0.000100	0.000300	NU	mg/L	1	05/13/14 08:44 PM
IS: Perchlorate_107	129	0	50-150	N	%REC	1	05/13/14 08:44 PM

Qualifiers:	*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
	C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
	E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
	MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
	RL	Reporting Limit	S	Spike Recovery outside control limits
	N	Parameter not NELAC certified		

DHL Analytical, Inc.

Date: *16-May-14*

CLIENT:	GCAL LAB	**Client Sample ID:**	MA02MW001D
Project:	Melrose	**Lab ID:**	1404319-10
Project No:		**Collection Date:**	04/25/14 12:52 PM
Lab Order:	1404319	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PERCHLORATE - WATER		**SW6860**					Analyst: **AS**
Perchlorate	0.0112	0.000495	0.00149	N	mg/L	1	05/14/14 12:01 PM
IS: Perchlorate_107	105	0	50-150	N	%REC	1	05/14/14 12:01 PM

Qualifiers:

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

DHL Analytical, Inc.

Date: *16-May-14*

CLIENT:	GCAL LAB	**Client Sample ID:**	MA02MW001D-a
Project:	Melrose	**Lab ID:**	1404319-11
Project No:		**Collection Date:**	04/25/14 12:52 PM
Lab Order:	1404319	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PERCHLORATE - WATER		**SW6860**					Analyst: **AS**
Perchlorate	0.0117	0.000495	0.00149	N	mg/L	1	05/14/14 12:17 PM
IS: Perchlorate_107	103	0	50-150	N	%REC	1	05/14/14 12:17 PM

Qualifiers:

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

CLIENT: GCAL LAB
Work Order: 1404319
Project: Melrose

ANALYTICAL QC SUMMARY REPORT

RunID: ICMS2_140513B

The QC data in batch 63496 applies to the following samples: 1404319-01A, 1404319-02A, 1404319-03A, 1404319-04A, 1404319-05A, 1404319-06A, 1404319-07A, 1404319-08A, 1404319-09A, 1404319-10A, 1404319-11A

Sample ID **MB-63496** Batch ID: **63496** TestNo: **SW6860** Units: **mg/L**
SampType: **MBLK** Run ID: **ICMS2_140513B** Analysis Date: **5/13/2014 5:31:00 PM** Prep Date: **5/13/2014**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.000100	0.000300								NU
IS: Perchlorate_107	0.00101		0.00100		145	50	150			N

Sample ID **LCS-63496** Batch ID: **63496** TestNo: **SW6860** Units: **mg/L**
SampType: **LCS** Run ID: **ICMS2_140513B** Analysis Date: **5/13/2014 5:47:00 PM** Prep Date: **5/13/2014**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.000287	0.000300	0.000300	0	95.6	85	115			N
IS: Perchlorate_107	0.00101		0.00100		150	50	150			N

Sample ID **1404319-01AMS** Batch ID: **63496** TestNo: **SW6860** Units: **mg/L**
SampType: **MS** Run ID: **ICMS2_140513B** Analysis Date: **5/13/2014 6:19:00 PM** Prep Date: **5/13/2014**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.00181	0.000300	0.000300	0.00142	129	85	115			SN
IS: Perchlorate_107	0.00101		0.00100		135	50	150			N

Sample ID **1405047-06AMS** Batch ID: **63496** TestNo: **SW6860** Units: **mg/L**
SampType: **MS** Run ID: **ICMS2_140513B** Analysis Date: **5/13/2014 11:56:00 PM** Prep Date: **5/13/2014**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.000282	0.000300	0.000300	0	93.9	85	115			N
IS: Perchlorate_107	0.00101		0.00100		105	50	150			N

Sample ID **1405047-06AMSD** Batch ID: **63496** TestNo: **SW6860** Units: **mg/L**
SampType: **MSD** Run ID: **ICMS2_140513B** Analysis Date: **5/14/2014 12:12:00 AM** Prep Date: **5/13/2014**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.000290	0.000300	0.000300	0	96.6	85	115	2.83	20	N
IS: Perchlorate_107	0.00101		0.00100		91.4	50	150	0	0	N

Sample ID **1404319-01AMSD** Batch ID: **63496** TestNo: **SW6860** Units: **mg/L**
SampType: **MSD** Run ID: **ICMS2_140513B** Analysis Date: **5/14/2014 12:57:00 PM** Prep Date: **5/13/2014**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.00181	0.000300	0.000300	0.00142	128	85	115	0.168	20	SN
IS: Perchlorate_107	0.00101		0.00100		114	50	150	0	0	N

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAC certified

CLIENT: GCAL LAB
Work Order: 1404319
Project: Melrose

ANALYTICAL QC SUMMARY REPORT

RunID: ICMS2_140513B

Sample ID **ICV-140513**	Batch ID: **R73097**	TestNo: **SW6860**	Units: **mg/L**
SampType: **ICV**	Run ID: **ICMS2_140513B**	Analysis Date: **5/13/2014 10:15:00 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.00193	0.000300	0.00200	0	96.7	85	115			N
IS: Perchlorate_107	0.00100		0.00100		128	50	150			N

Sample ID **LCVL-140513**	Batch ID: **R73097**	TestNo: **SW6860**	Units: **mg/L**
SampType: **LCVL**	Run ID: **ICMS2_140513B**	Analysis Date: **5/13/2014 10:31:00 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.000196	0.000300	0.000200	0	98.0	70	130			N
IS: Perchlorate_107	0.00100		0.00100		138	50	150			N

Sample ID **ICS-140513**	Batch ID: **R73097**	TestNo: **SW6860**	Units: **mg/L**
SampType: **ICS**	Run ID: **ICMS2_140513B**	Analysis Date: **5/13/2014 10:47:00 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.000271	0.000300	0.000300	0	90.3	70	130			N
IS: Perchlorate_107	0.00100		0.00100		115	50	150			N

Sample ID **CCV1-140513**	Batch ID: **R73097**	TestNo: **SW6860**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICMS2_140513B**	Analysis Date: **5/13/2014 4:16:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.00483	0.000300	0.00500	0	96.6	85	115			N
IS: Perchlorate_107	0.00100		0.00100		139	50	150			N

Sample ID **LCVL2-140513**	Batch ID: **R73097**	TestNo: **SW6860**	Units: **mg/L**
SampType: **LCVL**	Run ID: **ICMS2_140513B**	Analysis Date: **5/13/2014 4:36:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.000195	0.000300	0.000200	0	97.5	70	130			N
IS: Perchlorate_107	0.00100		0.00100		164	50	150			SN

Sample ID **CCV2-140513**	Batch ID: **R73097**	TestNo: **SW6860**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICMS2_140513B**	Analysis Date: **5/13/2014 9:16:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.00486	0.000300	0.00500	0	97.2	85	115			N
IS: Perchlorate_107	0.00100		0.00100		120	50	150			N

Qualifiers:

B	Analyte detected in the associated Method Blank
J	Analyte detected between MDL and RL
ND	Not Detected at the Method Detection Limit
RL	Reporting Limit
J	Analyte detected between SDL and RL
DF	Dilution Factor
MDL	Method Detection Limit
R	RPD outside accepted control limits
S	Spike Recovery outside control limits
N	Parameter not NELAC certified

CLIENT: GCAL LAB
Work Order: 1404319
Project: Melrose

ANALYTICAL QC SUMMARY REPORT

RunID: ICMS2_140513B

Sample ID **LCVL3-140513**	Batch ID: **R73097**	TestNo: **SW6860**	Units: **mg/L**
SampType: **LCVL**	Run ID: **ICMS2_140513B**	Analysis Date: **5/13/2014 9:32:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.000196	0.000300	0.000200	0	98.0	70	130			N
IS: Perchlorate_107	0.00100		0.00100		145	50	150			N

Sample ID **CCV3-140513**	Batch ID: **R73097**	TestNo: **SW6860**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICMS2_140513B**	Analysis Date: **5/14/2014 1:01:00 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.00483	0.000300	0.00500	0	96.6	85	115			N
IS: Perchlorate_107	0.00100		0.00100		107	50	150			N

Sample ID **LCVL4-140513**	Batch ID: **R73097**	TestNo: **SW6860**	Units: **mg/L**
SampType: **LCVL**	Run ID: **ICMS2_140513B**	Analysis Date: **5/14/2014 1:17:00 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.000217	0.000300	0.000200	0	108	70	130			N
IS: Perchlorate_107	0.00100		0.00100		132	50	150			N

Sample ID **ICV-140514**	Batch ID: **R73097**	TestNo: **SW6860**	Units: **mg/L**
SampType: **ICV**	Run ID: **ICMS2_140513B**	Analysis Date: **5/14/2014 10:13:00 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.00195	0.000300	0.00200	0	97.5	85	115			N
IS: Perchlorate_107	0.00100		0.00100		136	50	150			N

Sample ID **LCVL1-140514**	Batch ID: **R73097**	TestNo: **SW6860**	Units: **mg/L**
SampType: **LCVL**	Run ID: **ICMS2_140513B**	Analysis Date: **5/14/2014 10:29:00 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.000191	0.000300	0.000200	0	95.5	70	130			N
IS: Perchlorate_107	0.00100		0.00100		152	50	150			SN

Sample ID **ICS-140514**	Batch ID: **R73097**	TestNo: **SW6860**	Units: **mg/L**
SampType: **ICS**	Run ID: **ICMS2_140513B**	Analysis Date: **5/14/2014 10:45:00 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.000276	0.000300	0.000300	0	92.0	70	130			N
IS: Perchlorate_107	0.00100		0.00100		126	50	150			N

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAC certified

CLIENT: GCAL LAB
Work Order: 1404319
Project: Melrose

ANALYTICAL QC SUMMARY REPORT

RunID: ICMS2_140513B

Sample ID **CCV-140514**	Batch ID: **R73097**	TestNo: **SW6860**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICMS2_140513B**	Analysis Date: **5/14/2014 1:13:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.00485	0.000300	0.00500	0	97.0	85	115			N
IS: Perchlorate_107	0.00100		0.00100		117	50	150			N

Sample ID **LCVL2-140514**	Batch ID: **R73097**	TestNo: **SW6860**	Units: **mg/L**
SampType: **LCVL**	Run ID: **ICMS2_140513B**	Analysis Date: **5/14/2014 1:29:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.000176	0.000300	0.000200	0	88.0	70	130			N
IS: Perchlorate_107	0.00100		0.00100		140	50	150			N

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAC certified

Lab Order: 1404319
Client: GCAL LAB
Project: Melrose

Sequence Report

Run ID: ICMS2_140513B

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date	Matrix
LRB1-140513	-----	SW6860	R73097	1	5/13/2014 9:59:00 AM		A
ICV-140513	-----	SW6860	R73097	1	5/13/2014 10:15:00 AM		A
LCVL-140513	-----	SW6860	R73097	1	5/13/2014 10:31:00 AM		A
ICS-140513	-----	SW6860	R73097	1	5/13/2014 10:47:00 AM		A
CCV1-140513	-----	SW6860	R73097	1	5/13/2014 4:16:00 PM		A
LCVL2-140513	-----	SW6860	R73097	1	5/13/2014 4:36:00 PM		A
LRB2-140513	-----	SW6860	R73097	1	5/13/2014 5:15:00 PM		A
MB-63496	-----	SW6860	63496	1	5/13/2014 5:31:00 PM	5/13/2014 1:01:56 PM	A
LCS-63496	-----	SW6860	63496	1	5/13/2014 5:47:00 PM	5/13/2014 1:01:56 PM	A
1404319-01A	MA01MW002	SW6860	63496	1	5/13/2014 6:03:00 PM	5/13/2014 1:01:56 PM	A
1404319-01AMS	MA01MW002MS	SW6860	63496	1	5/13/2014 6:19:00 PM	5/13/2014 1:01:56 PM	A
1404319-02A	MA01MW003	SW6860	63496	1	5/13/2014 6:51:00 PM	5/13/2014 1:01:56 PM	A
1404319-03A	MA01MW001	SW6860	63496	1	5/13/2014 7:07:00 PM	5/13/2014 1:01:56 PM	A
1404319-04A	MA01MW004	SW6860	63496	1	5/13/2014 7:23:00 PM	5/13/2014 1:01:56 PM	A
1404319-05A	M114MW003	SW6860	63496	1	5/13/2014 7:39:00 PM	5/13/2014 1:01:56 PM	A
1404319-06A	M114MW002	SW6860	63496	1	5/13/2014 7:55:00 PM	5/13/2014 1:01:56 PM	A
1404319-07A	M114MW001	SW6860	63496	1	5/13/2014 8:11:00 PM	5/13/2014 1:01:56 PM	A
1404319-08A	M114MW004	SW6860	63496	1	5/13/2014 8:27:00 PM	5/13/2014 1:01:56 PM	A
1404319-09A	MWQ-24	SW6860	63496	1	5/13/2014 8:44:00 PM	5/13/2014 1:01:56 PM	A
1404319-10A	MA02MW001D	SW6860	63496	1	5/13/2014 9:00:00 PM	5/13/2014 1:01:56 PM	A
CCV2-140513	-----	SW6860	R73097	1	5/13/2014 9:16:00 PM		A
LCVL3-140513	-----	SW6860	R73097	1	5/13/2014 9:32:00 PM		A
LRB3-140513	-----	SW6860	R73097	1	5/13/2014 9:48:00 PM		A
1404319-11A	MA02MW001D-a	SW6860	63496	1	5/13/2014 10:04:00 PM	5/13/2014 1:01:56 PM	A
1405047-06AMS	-----	SW6860	63496	1	5/13/2014 11:56:00 PM	5/13/2014 1:01:56 PM	A
1405047-06AMSD	-----	SW6860	63496	1	5/14/2014 12:12:00 AM	5/13/2014 1:01:56 PM	A
CCV3-140513	-----	SW6860	R73097	1	5/14/2014 1:01:00 AM		A
LCVL4-140513	-----	SW6860	R73097	1	5/14/2014 1:17:00 AM		A
LRB4-140513	-----	SW6860	R73097	1	5/14/2014 1:33:00 AM		A
LRB1-140514	-----	SW6860	R73097	1	5/14/2014 9:57:00 AM		A
ICV-140514	-----	SW6860	R73097	1	5/14/2014 10:13:00 AM		A
LCVL1-140514	-----	SW6860	R73097	1	5/14/2014 10:29:00 AM		A
ICS-140514	-----	SW6860	R73097	1	5/14/2014 10:45:00 AM		A
1404319-05A	M114MW003	SW6860	63496	1	5/14/2014 11:45:00 AM	5/13/2014 1:01:56 PM	A
1404319-10A	MA02MW001D	SW6860	63496	1	5/14/2014 12:01:00 PM	5/13/2014 1:01:56 PM	A
1404319-11A	MA02MW001D-a	SW6860	63496	1	5/14/2014 12:17:00 PM	5/13/2014 1:01:56 PM	A
1404319-01AMSD	MA01MW002MSD	SW6860	63496	1	5/14/2014 12:57:00 PM	5/13/2014 1:01:56 PM	A
CCV-140514	-----	SW6860	R73097	1	5/14/2014 1:13:00 PM		A

Lab Order: 1404319
Client: GCAL LAB
Project: Melrose

Sequence Report

LCVL2-140514	-----	SW6860	R73097	1	5/14/2014 1:29:00 PM	A
LRB2-140514	-----	SW6860	R73097	1	5/14/2014 1:45:00 PM	A

NELAP CERTIFICATE NUMBER 01955
DOD ELAP CERTIFICATE NUMBER L13-190

ANALYTICAL RESULTS

PERFORMED BY

GCAL, LLC
7979 Innovation Park Dr.
Baton Rouge, LA 70820

Report Date 05/23/2014

GCAL Report 214043009

Deliver To	Trinity A&D 1002 N Eglin Pkwy Shalimar, FL 32579 850-613-6800
Attn	Jonathan Kramer

Customer TRINITY Analysis & Development Corp.

Project Melrose

Case Narrative

Client: TRINITY Analysis & Development Corp. **Report:** 214043009

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the sample cross-reference page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

METALS

In the EPA 6020A analysis, all samples had to be diluted in order to bracket the concentration of target analytes within the calibration range of the instrument and to eliminate a chemical or physical interference. This is reflected in elevated detection limits.

The dissolved concentration for some analytes is slightly greater than the total concentration of these analytes in several samples. This is attributed to separate aliquots of sample.Total concentration for several elements in several samples.

In the EPA 6020A analysis for prep batch 531339, the MS and/or MSD recovery is outside the control limits for Antimony, Chromium, and Lead. The LCS recovery is within control limits. This indicates the analysis is in control and the sample is affected by matrix interference. A post-digestion spike was performed on the QC sample for this batch with a recovery of 105% for Antimony, 85% for Chromium and 48% for Lead. The MS/MSD recoveries are not applicable for Calcium, Magnesium, and Sodium because the sample concentration is greater than four times the spike concentration.

In the EPA 6020A analysis for prep batch 531343, the MS and/or MSD recovery is outside the control limits for Silver. The LCS recovery is within the control limits. This indicates the analysis is in control and the sample is affected by matrix interference. The MS/MSD recoveries are not applicable for Calcium and Sodium because the sample concentration is greater than four times the spike concentration.

In the EPA 6020A analysis for prep batch 531448, the MS and/or MSD recovery is outside the control limits for Manganese and Silver. The LCS recovery is within control limits. This indicates the analysis is in control and the sample is affected by matrix interference. A post-digestion spike was performed on the QC sample for this batch with a recovery of 94% for Manganese and 90% for Silver. The MS/MSD recoveries are not applicable for Sodium because the sample concentration is greater than four times the spike concentration.

In the EPA 6020A analysis for prep batch 531449, the MS and/or MSD recovery is outside the control limits for Silver. The LCS recovery is within the control limits. This indicates the analysis is in control and the sample is affected by matrix interference. The MS/MSD recoveries are not applicable for Aluminum, Magnesium, and Sodium because the sample concentration is greater than four times the spike concentration.

In the EPA 6020A analysis for prep batch 531670, the MS and/or MSD recovery is outside the control limits for Barium, Iron, and Titanium. The LCS recovery is within control limits. This indicates the analysis is in control and the sample is affected by matrix interference. A post-digestion spike was performed on the QC sample for this batch with a recovery of 100% for Barium, 104% for Iron, and 161% for Titanium.

In the EPA 6020A analysis for prep batch 531722, the MS/MSD recoveries are not applicable for Sodium because the sample concentration is greater than four times the spike concentration.

In the EPA 7470A Dissolved and EPA 7470A analysis for prep batch 531447, the MS and/or MSD recovery is outside the control limits for Mercury. The LCS recovery is within the control limits. This indicates the analysis is in control and the sample is affected by matrix interference.

In the EPA 6020A analysis for analytical batch 532028, the recovery for Beryllium is above the upper control limit in one CCV (ICPMS1, 05/09/14 at 0154). This analytes was not detected in the associated samples.

CONVENTIONALS

In the EPA 353.2 analysis, samples 21404300903 (MWQ-21) and 21404300909 (MWQ-14) had to be diluted in order to bracket the Nitrate + Nitrite and/or Nitrite concentrations within the calibration range of the instrument. The Nitrate is based on the difference between the Nitrate + Nitrite and the Nitrite.

In the EPA 300.0 analysis, all samples had to be diluted in order to bracket the concentration within the calibration range of the instrument.

In the EPA 353.2 Nitrate analysis for analytical batch 531567, the MS/MSD recovery was outside the control limits for Nitrate. The LCS recovery was within control limits. This indicates the analysis is in control and the sample is affected by matrix interference.

MISCELLANEOUS

See sub-contract laboratory case narrative.

Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

Common Abbreviations Utilized in this Report

ND	Indicates the result was Not Detected at the specified RDL
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
RDL	Reporting Detection Limit
00:00	Reported as a time equivalent to 12:00 AM

Reporting Flags Utilized in this Report

J	Indicates the result is between the MDL and RDL
U	Indicates the compound was analyzed for but not detected
B	Indicates the analyte was detected in the associated Method Blank

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with NELAC, this report shall be reproduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with the NELAC standard and terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Estimated uncertainty of measurement is available upon request. This report is in compliance with the DOD QSM as specified in the contract if applicable.

_____

Authorized Signature
GCAL REPORT 214043009

THIS REPORT CONTAINS _____ PAGES.

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300901	MWQ-19	Water	04/29/2014 08:41	04/30/2014 10:00
21404300902	MWQ-18	Water	04/29/2014 09:31	04/30/2014 10:00
21404300903	MWQ-21	Water	04/29/2014 12:41	04/30/2014 10:00
21404300904	MWQ-22	Water	04/30/2014 08:41	05/01/2014 10:00
21404300905	MWQ-22-a	Water	04/30/2014 08:41	05/01/2014 10:00
21404300906	MWQ-2	Water	04/30/2014 10:46	05/01/2014 10:00
21404300907	MWQ-2-ms	Water	04/30/2014 10:46	05/01/2014 10:00
21404300908	MWQ-2-sd	Water	04/30/2014 10:46	05/01/2014 10:00
21404300909	MWQ-14	Water	05/01/2014 07:51	05/02/2014 10:00
21404300910	MWQ-20	Water	05/01/2014 10:16	05/02/2014 10:00

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300901	**MWQ-19**	Water	04/29/2014 08:41	04/30/2014 10:00

Subcontract Data

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/20/2014 14:57	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-001	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300901	**MWQ-19**	Water	04/29/2014 08:41	04/30/2014 10:00

Subcontract Data

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/20/2014 14:58	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-000	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300901	**MWQ-19**	Water	04/29/2014 08:41	04/30/2014 10:00

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/30/2014 12:30	531339	EPA 3010A	250	05/06/2014 21:07	BAM	531759

CAS#	Parameter	Result	RDL	MDL	Units
7440-70-2	**Calcium**	**346000**	**125000**	**31300**	**ug/L**
7439-95-4	**Magnesium**	**185000**	**25000**	**6250**	**ug/L**
7440-23-5	**Sodium**	**1070000**	**25000**	**6250**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300901	**MWQ-19**	Water	04/29/2014 08:41	04/30/2014 10:00

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/30/2014 12:30	531339	EPA 3010A	5	05/08/2014 09:22	BAM	531901

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	**Aluminum**	**44.4J**	**100**	**25.0**	**ug/L**
7440-36-0	**Antimony**	**3.44J**	**10.0**	**2.50**	**ug/L**
7440-38-2	Arsenic	1.25U	5.00	1.25	ug/L
7440-39-3	**Barium**	**42.3**	**5.00**	**1.25**	**ug/L**
7440-41-7	Beryllium	1.25U	5.00	1.25	ug/L
7440-43-9	Cadmium	1.25U	5.00	1.25	ug/L
7440-47-3	**Chromium**	**22.6**	**5.00**	**1.25**	**ug/L**
7440-48-4	Cobalt	1.25U	5.00	1.25	ug/L
7440-50-8	Copper	1.25U	5.00	1.25	ug/L
7439-89-6	**Iron**	**1360**	**500**	**125**	**ug/L**
7439-92-1	**Lead**	**120**	**5.00**	**1.25**	**ug/L**
7439-96-5	**Manganese**	**383**	**25.0**	**6.25**	**ug/L**
7439-98-7	**Molybdenum**	**4.33J**	**5.00**	**1.25**	**ug/L**
7440-02-0	Nickel	2.50U	10.0	2.50	ug/L
7440-09-7	**Potassium**	**9450**	**500**	**125**	**ug/L**
7782-49-2	**Selenium**	**2.13J**	**5.00**	**1.25**	**ug/L**
7440-22-4	Silver	1.25U	5.00	1.25	ug/L
7440-28-0	Thallium	1.25U	5.00	1.25	ug/L
7440-32-6	**Titanium**	**1.35J**	**5.00**	**1.25**	**ug/L**
7440-62-2	Vanadium	1.25U	5.00	1.25	ug/L
7440-66-6	**Zinc**	**84.4J**	**100**	**25.0**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300901	**MWQ-19**	Water	04/29/2014 08:41	04/30/2014 10:00

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/30/2014 10:55	531258	EPA 7470A Dissolved	1	05/01/2014 16:21	PJS	531465

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.070U	0.20	0.070	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300901	**MWQ-19**	Water	04/29/2014 08:41	04/30/2014 10:00

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/30/2014 10:55	531258	EPA 7470A	1	05/01/2014 16:19	PJS	531465

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.070U	0.20	0.070	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300901	**MWQ-19**	Water	04/29/2014 08:41	04/30/2014 10:00

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/30/2014 15:55	531343	EPA 3005A Dissolved	250	05/08/2014 00:22	BAM	531901

CAS#	Parameter	Result	RDL	MDL	Units
7440-70-2	**Calcium**	**351000**	**125000**	**31300**	**ug/L**
7439-95-4	**Magnesium**	**186000**	**25000**	**6250**	**ug/L**
7440-23-5	**Sodium**	**1070000**	**25000**	**6250**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300901	**MWQ-19**	Water	04/29/2014 08:41	04/30/2014 10:00

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/30/2014 15:55	531343	EPA 3005A Dissolved	5	05/08/2014 02:37	BAM	531901

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	25.0U	100	25.0	ug/L
7440-36-0	Antimony	2.50U	10.0	2.50	ug/L
7440-38-2	Arsenic	1.25U	5.00	1.25	ug/L
7440-39-3	**Barium**	**32.9**	**5.00**	**1.25**	**ug/L**
7440-41-7	Beryllium	1.25U	5.00	1.25	ug/L
7440-43-9	Cadmium	1.25U	5.00	1.25	ug/L
7440-47-3	Chromium	1.25U	5.00	1.25	ug/L
7440-48-4	Cobalt	1.25U	5.00	1.25	ug/L
7440-50-8	Copper	1.25U	5.00	1.25	ug/L
7439-89-6	**Iron**	**1240**	**500**	**125**	**ug/L**
7439-92-1	Lead	1.25U	5.00	1.25	ug/L
7439-96-5	**Manganese**	**364**	**25.0**	**6.25**	**ug/L**
7439-98-7	**Molybdenum**	**1.30J**	**5.00**	**1.25**	**ug/L**
7440-02-0	Nickel	2.50U	10.0	2.50	ug/L
7440-09-7	**Potassium**	**8960**	**500**	**125**	**ug/L**
7782-49-2	**Selenium**	**1.62J**	**5.00**	**1.25**	**ug/L**
7440-22-4	Silver	1.25U	5.00	1.25	ug/L
7440-28-0	Thallium	1.25U	5.00	1.25	ug/L
7440-32-6	Titanium	1.25U	5.00	1.25	ug/L
7440-62-2	Vanadium	1.25U	5.00	1.25	ug/L
7440-66-6	Zinc	25.0U	100	25.0	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300901	**MWQ-19**	Water	04/29/2014 08:41	04/30/2014 10:00

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/01/2014 15:49	JRM	531426

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	**Total Dissolved Solids(TDS)**	**4070**	**10.0**	**4.39**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300901	**MWQ-19**	Water	04/29/2014 08:41	04/30/2014 10:00

EPA 353.2 Rev. 2

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/30/2014 12:34	DMT	531299

CAS#	Parameter	Result	RDL	MDL	Units
14797-65-0	**Nitrite**	**0.006J**	**0.010**	**0.006**	**mg/L-N**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300901	**MWQ-19**	Water	04/29/2014 08:41	04/30/2014 10:00

EPA 353.2 Rev. 2

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/30/2014 11:59	DMT	531300

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	0.008U	0.010	0.008	mg/L-N

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300901	**MWQ-19**	Water	04/29/2014 08:41	04/30/2014 10:00

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1000	05/03/2014 16:20	AEL	531586

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	**Chloride**	**1850**	**200**	**50.0**	**mg/L**
14808-79-8	**Sulfate**	**1350**	**200**	**50.0**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300901	**MWQ-19**	Water	04/29/2014 08:41	04/30/2014 10:00

SM 2320 B-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/02/2014 13:28	DJH	531554

CAS#	Parameter	Result	RDL	MDL	Units
000000-00-5	**Total Alkalinity**	**399**	**1.0**	**0.26**	**mg/L CaCO3**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300901	**MWQ-19**	Water	04/29/2014 08:41	04/30/2014 10:00

EPA 9012B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/02/2014 12:20	531527	Cyanide Prep	1	05/04/2014 11:16	AEL	531627

CAS#	Parameter	Result	RDL	MDL	Units
57-12-5	**Cyanide**	**0.0017J**	**0.0050**	**0.00050**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300902	**MWQ-18**	Water	04/29/2014 09:31	04/30/2014 10:00

Subcontract Data

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/20/2014 14:58	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-000	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300902	**MWQ-18**	Water	04/29/2014 09:31	04/30/2014 10:00

Subcontract Data

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/20/2014 14:58	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-001	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300902	**MWQ-18**	Water	04/29/2014 09:31	04/30/2014 10:00

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/30/2014 12:30	531339	EPA 3010A	10	05/06/2014 22:24	BAM	531759

CAS#	Parameter	Result	RDL	MDL	Units
7439-95-4	**Magnesium**	**19900**	**1000**	**250**	**ug/L**
7440-23-5	**Sodium**	**65800**	**1000**	**250**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300902	**MWQ-18**	Water	04/29/2014 09:31	04/30/2014 10:00

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/30/2014 12:30	531339	EPA 3010A	1	05/06/2014 23:32	BAM	531759

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	**Aluminum**	**134**	**20.0**	**5.00**	**ug/L**
7440-36-0	Antimony	0.50U	2.00	0.50	ug/L
7440-38-2	**Arsenic**	**7.02**	**1.00**	**0.25**	**ug/L**
7440-39-3	**Barium**	**34.1**	**1.00**	**0.25**	**ug/L**
7440-41-7	Beryllium	0.25U	1.00	0.25	ug/L
7440-43-9	Cadmium	0.25U	1.00	0.25	ug/L
7440-70-2	**Calcium**	**46800**	**500**	**125**	**ug/L**
7440-47-3	**Chromium**	**0.75J**	**1.00**	**0.25**	**ug/L**
7440-48-4	Cobalt	0.25U	1.00	0.25	ug/L
7440-50-8	**Copper**	**0.68J**	**1.00**	**0.25**	**ug/L**
7439-89-6	**Iron**	**74.6J**	**100**	**25.0**	**ug/L**
7439-92-1	Lead	0.25U	1.00	0.25	ug/L
7439-96-5	**Manganese**	**2.70J**	**5.00**	**1.25**	**ug/L**
7439-98-7	**Molybdenum**	**4.52**	**1.00**	**0.25**	**ug/L**
7440-02-0	Nickel	0.50U	2.00	0.50	ug/L
7440-09-7	**Potassium**	**2700**	**100**	**25.0**	**ug/L**
7782-49-2	**Selenium**	**2.41**	**1.00**	**0.25**	**ug/L**
7440-22-4	Silver	0.25U	1.00	0.25	ug/L
7440-28-0	Thallium	0.25U	1.00	0.25	ug/L
7440-32-6	**Titanium**	**1.56**	**1.00**	**0.25**	**ug/L**
7440-62-2	**Vanadium**	**56.3**	**1.00**	**0.25**	**ug/L**
7440-66-6	**Zinc**	**9.73J**	**20.0**	**5.00**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300902	**MWQ-18**	Water	04/29/2014 09:31	04/30/2014 10:00

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/30/2014 10:55	531258	EPA 7470A Dissolved	1	05/01/2014 16:35	PJS	531465

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.070U	0.20	0.070	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300902	**MWQ-18**	Water	04/29/2014 09:31	04/30/2014 10:00

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/30/2014 10:55	531258	EPA 7470A	1	05/01/2014 16:22	PJS	531465

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.070U	0.20	0.070	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300902	**MWQ-18**	Water	04/29/2014 09:31	04/30/2014 10:00

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/30/2014 15:55	531343	EPA 3005A Dissolved	10	05/08/2014 01:01	BAM	531901

CAS#	Parameter	Result	RDL	MDL	Units
7439-95-4	**Magnesium**	**20000**	**1000**	**250**	**ug/L**
7440-23-5	**Sodium**	**64400**	**1000**	**250**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300902	**MWQ-18**	Water	04/29/2014 09:31	04/30/2014 10:00

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/30/2014 15:55	531343	EPA 3005A Dissolved	1	05/08/2014 03:15	BAM	531901

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	**Aluminum**	**13.9J**	**20.0**	**5.00**	**ug/L**
7440-36-0	Antimony	0.50U	2.00	0.50	ug/L
7440-38-2	**Arsenic**	**7.83**	**1.00**	**0.25**	**ug/L**
7440-39-3	**Barium**	**33.5**	**1.00**	**0.25**	**ug/L**
7440-41-7	Beryllium	0.25U	1.00	0.25	ug/L
7440-43-9	Cadmium	0.25U	1.00	0.25	ug/L
7440-70-2	**Calcium**	**47700**	**500**	**125**	**ug/L**
7440-47-3	**Chromium**	**0.65J**	**1.00**	**0.25**	**ug/L**
7440-48-4	Cobalt	0.25U	1.00	0.25	ug/L
7440-50-8	**Copper**	**0.45J**	**1.00**	**0.25**	**ug/L**
7439-89-6	Iron	25.0U	100	25.0	ug/L
7439-92-1	Lead	0.25U	1.00	0.25	ug/L
7439-96-5	Manganese	1.25U	5.00	1.25	ug/L
7439-98-7	**Molybdenum**	**4.47**	**1.00**	**0.25**	**ug/L**
7440-02-0	Nickel	0.50U	2.00	0.50	ug/L
7440-09-7	**Potassium**	**2700**	**100**	**25.0**	**ug/L**
7782-49-2	**Selenium**	**2.90**	**1.00**	**0.25**	**ug/L**
7440-22-4	Silver	0.25U	1.00	0.25	ug/L
7440-28-0	Thallium	0.25U	1.00	0.25	ug/L
7440-32-6	**Titanium**	**0.32J**	**1.00**	**0.25**	**ug/L**
7440-62-2	**Vanadium**	**57.7**	**1.00**	**0.25**	**ug/L**
7440-66-6	**Zinc**	**7.15J**	**20.0**	**5.00**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300902	**MWQ-18**	Water	04/29/2014 09:31	04/30/2014 10:00

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/01/2014 15:49	JRM	531426

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	**Total Dissolved Solids(TDS)**	**364**	**10.0**	**4.39**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300902	**MWQ-18**	Water	04/29/2014 09:31	04/30/2014 10:00

EPA 353.2 Rev. 2

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/30/2014 12:35	DMT	531299

CAS#	Parameter	Result	RDL	MDL	Units
14797-65-0	Nitrite	0.006U	0.010	0.006	mg/L-N

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300902	**MWQ-18**	Water	04/29/2014 09:31	04/30/2014 10:00

EPA 353.2 Rev. 2

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/30/2014 12:00	DMT	531300

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	**Nitrate**	**0.298**	**0.010**	**0.008**	**mg/L-N**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300902	**MWQ-18**	Water	04/29/2014 09:31	04/30/2014 10:00

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			50	05/03/2014 16:38	AEL	531586

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	**Chloride**	**37.6**	**10.0**	**2.50**	**mg/L**
14808-79-8	**Sulfate**	**116**	**10.0**	**2.50**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300902	**MWQ-18**	Water	04/29/2014 09:31	04/30/2014 10:00

SM 2320 B-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/02/2014 13:28	DJH	531554

CAS#	Parameter	Result	RDL	MDL	Units
000000-00-5	**Total Alkalinity**	**172**	**1.0**	**0.26**	**mg/L CaCO3**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300902	**MWQ-18**	Water	04/29/2014 09:31	04/30/2014 10:00

EPA 9012B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/02/2014 12:20	531527	Cyanide Prep	1	05/04/2014 11:17	AEL	531627

CAS#	Parameter	Result	RDL	MDL	Units
57-12-5	**Cyanide**	**0.0022J**	**0.0050**	**0.00050**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300903	**MWQ-21**	Water	04/29/2014 12:41	04/30/2014 10:00

Subcontract Data

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/20/2014 14:58	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-000	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300903	**MWQ-21**	Water	04/29/2014 12:41	04/30/2014 10:00

Subcontract Data

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/20/2014 14:58	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-001	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300903	**MWQ-21**	Water	04/29/2014 12:41	04/30/2014 10:00

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/30/2014 12:30	531339	EPA 3010A	50	05/06/2014 22:34	BAM	531759

CAS#	Parameter	Result	RDL	MDL	Units
7440-70-2	**Calcium**	**95200**	**25000**	**6250**	**ug/L**
7439-95-4	**Magnesium**	**41600**	**5000**	**1250**	**ug/L**
7440-23-5	**Sodium**	**143000**	**5000**	**1250**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300903	**MWQ-21**	Water	04/29/2014 12:41	04/30/2014 10:00

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/30/2014 12:30	531339	EPA 3010A	1	05/06/2014 23:41	BAM	531759

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	**Aluminum**	**1080**	**20.0**	**5.00**	**ug/L**
7440-36-0	Antimony	0.50U	2.00	0.50	ug/L
7440-38-2	**Arsenic**	**4.93**	**1.00**	**0.25**	**ug/L**
7440-39-3	**Barium**	**33.8**	**1.00**	**0.25**	**ug/L**
7440-41-7	Beryllium	0.25U	1.00	0.25	ug/L
7440-43-9	Cadmium	0.25U	1.00	0.25	ug/L
7440-47-3	**Chromium**	**1.13**	**1.00**	**0.25**	**ug/L**
7440-48-4	**Cobalt**	**0.36J**	**1.00**	**0.25**	**ug/L**
7440-50-8	**Copper**	**0.82J**	**1.00**	**0.25**	**ug/L**
7439-89-6	**Iron**	**563**	**100**	**25.0**	**ug/L**
7439-92-1	**Lead**	**0.87J**	**1.00**	**0.25**	**ug/L**
7439-96-5	**Manganese**	**15.3**	**5.00**	**1.25**	**ug/L**
7439-98-7	**Molybdenum**	**9.79**	**1.00**	**0.25**	**ug/L**
7440-02-0	**Nickel**	**0.71J**	**2.00**	**0.50**	**ug/L**
7440-09-7	**Potassium**	**7600**	**100**	**25.0**	**ug/L**
7782-49-2	**Selenium**	**8.19**	**1.00**	**0.25**	**ug/L**
7440-22-4	Silver	0.25U	1.00	0.25	ug/L
7440-28-0	Thallium	0.25U	1.00	0.25	ug/L
7440-32-6	**Titanium**	**13.4**	**1.00**	**0.25**	**ug/L**
7440-62-2	**Vanadium**	**42.2**	**1.00**	**0.25**	**ug/L**
7440-66-6	**Zinc**	**79.2**	**20.0**	**5.00**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300903	**MWQ-21**	Water	04/29/2014 12:41	04/30/2014 10:00

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/30/2014 10:55	531258	EPA 7470A Dissolved	1	05/01/2014 16:38	PJS	531465

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.070U	0.20	0.070	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300903	**MWQ-21**	Water	04/29/2014 12:41	04/30/2014 10:00

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/30/2014 10:55	531258	EPA 7470A	1	05/01/2014 16:36	PJS	531465

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.070U	0.20	0.070	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300903	**MWQ-21**	Water	04/29/2014 12:41	04/30/2014 10:00

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/30/2014 15:55	531343	EPA 3005A Dissolved	50	05/08/2014 01:10	BAM	531901

CAS#	Parameter	Result	RDL	MDL	Units
7440-70-2	**Calcium**	**110000**	**25000**	**6250**	**ug/L**
7439-95-4	**Magnesium**	**48100**	**5000**	**1250**	**ug/L**
7440-23-5	**Sodium**	**163000**	**5000**	**1250**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300903	**MWQ-21**	Water	04/29/2014 12:41	04/30/2014 10:00

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/30/2014 15:55	531343	EPA 3005A Dissolved	1	05/08/2014 03:25	BAM	531901

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	**Aluminum**	**29.2**	**20.0**	**5.00**	**ug/L**
7440-36-0	Antimony	0.50U	2.00	0.50	ug/L
7440-38-2	**Arsenic**	**5.86**	**1.00**	**0.25**	**ug/L**
7440-39-3	**Barium**	**28.3**	**1.00**	**0.25**	**ug/L**
7440-41-7	Beryllium	0.25U	1.00	0.25	ug/L
7440-43-9	Cadmium	0.25U	1.00	0.25	ug/L
7440-47-3	**Chromium**	**0.49J**	**1.00**	**0.25**	**ug/L**
7440-48-4	Cobalt	0.25U	1.00	0.25	ug/L
7440-50-8	**Copper**	**0.43J**	**1.00**	**0.25**	**ug/L**
7439-89-6	Iron	25.0U	100	25.0	ug/L
7439-92-1	Lead	0.25U	1.00	0.25	ug/L
7439-96-5	Manganese	1.25U	5.00	1.25	ug/L
7439-98-7	**Molybdenum**	**11.2**	**1.00**	**0.25**	**ug/L**
7440-02-0	Nickel	0.50U	2.00	0.50	ug/L
7440-09-7	**Potassium**	**8510**	**100**	**25.0**	**ug/L**
7782-49-2	**Selenium**	**10.7**	**1.00**	**0.25**	**ug/L**
7440-22-4	Silver	0.25U	1.00	0.25	ug/L
7440-28-0	Thallium	0.25U	1.00	0.25	ug/L
7440-32-6	**Titanium**	**0.64J**	**1.00**	**0.25**	**ug/L**
7440-62-2	**Vanadium**	**46.3**	**1.00**	**0.25**	**ug/L**
7440-66-6	**Zinc**	**9.65J**	**20.0**	**5.00**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300903	**MWQ-21**	Water	04/29/2014 12:41	04/30/2014 10:00

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/01/2014 15:49	JRM	531426

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	**Total Dissolved Solids(TDS)**	**970**	**10.0**	**4.39**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300903	**MWQ-21**	Water	04/29/2014 12:41	04/30/2014 10:00

EPA 353.2 Rev. 2

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/30/2014 12:36	DMT	531299

CAS#	Parameter	Result	RDL	MDL	Units
14797-65-0	Nitrite	0.006U	0.010	0.006	mg/L-N

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300903	**MWQ-21**	Water	04/29/2014 12:41	04/30/2014 10:00

EPA 353.2 Rev. 2

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			5	04/30/2014 12:06	DMT	531300

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	**Nitrate**	**1.47**	**0.050**	**0.041**	**mg/L-N**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300903	**MWQ-21**	Water	04/29/2014 12:41	04/30/2014 10:00

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			100	05/03/2014 16:55	AEL	531586

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	**Chloride**	**113**	**20.0**	**5.00**	**mg/L**
14808-79-8	**Sulfate**	**424**	**20.0**	**5.00**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300903	**MWQ-21**	Water	04/29/2014 12:41	04/30/2014 10:00

SM 2320 B-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/02/2014 13:28	DJH	531554

CAS#	Parameter	Result	RDL	MDL	Units
000000-00-5	**Total Alkalinity**	**236**	**1.0**	**0.26**	**mg/L CaCO3**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300903	**MWQ-21**	Water	04/29/2014 12:41	04/30/2014 10:00

EPA 9012B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/02/2014 12:20	531527	Cyanide Prep	1	05/04/2014 11:18	AEL	531627

CAS#	Parameter	Result	RDL	MDL	Units
57-12-5	**Cyanide**	**0.0031J**	**0.0050**	**0.00050**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300904	**MWQ-22**	Water	04/30/2014 08:41	05/01/2014 10:00

Subcontract Data

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/20/2014 14:59	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-000	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300904	**MWQ-22**	Water	04/30/2014 08:41	05/01/2014 10:00

Subcontract Data

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/20/2014 14:59	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-001	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300904	**MWQ-22**	Water	04/30/2014 08:41	05/01/2014 10:00

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/01/2014 13:00	531448	EPA 3010A	10	05/08/2014 04:23	BAM	531901

CAS#	Parameter	Result	RDL	MDL	Units
7439-95-4	**Magnesium**	**21800**	**1000**	**250**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300904	**MWQ-22**	Water	04/30/2014 08:41	05/01/2014 10:00

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/01/2014 13:00	531448	EPA 3010A	2	05/08/2014 04:32	BAM	531901

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	**Aluminum**	**18.3J**	**40.0**	**10.0**	**ug/L**
7440-36-0	Antimony	1.00U	4.00	1.00	ug/L
7440-38-2	Arsenic	0.50U	2.00	0.50	ug/L
7440-39-3	**Barium**	**36.5**	**2.00**	**0.50**	**ug/L**
7440-41-7	Beryllium	0.50U	2.00	0.50	ug/L
7440-43-9	Cadmium	0.50U	2.00	0.50	ug/L
7440-70-2	**Calcium**	**51100**	**1000**	**250**	**ug/L**
7440-47-3	Chromium	0.50U	2.00	0.50	ug/L
7440-48-4	Cobalt	0.50U	2.00	0.50	ug/L
7440-50-8	**Copper**	**0.59J**	**2.00**	**0.50**	**ug/L**
7439-89-6	**Iron**	**351**	**200**	**50.0**	**ug/L**
7439-92-1	Lead	0.50U	2.00	0.50	ug/L
7439-96-5	**Manganese**	**152**	**10.0**	**2.50**	**ug/L**
7439-98-7	**Molybdenum**	**13.2**	**2.00**	**0.50**	**ug/L**
7440-02-0	Nickel	1.00U	4.00	1.00	ug/L
7440-09-7	**Potassium**	**3130**	**200**	**50.0**	**ug/L**
7782-49-2	**Selenium**	**0.71J**	**2.00**	**0.50**	**ug/L**
7440-22-4	Silver	0.50U	2.00	0.50	ug/L
7440-28-0	Thallium	0.50U	2.00	0.50	ug/L
7440-32-6	Titanium	0.50U	2.00	0.50	ug/L
7440-62-2	Vanadium	0.50U	2.00	0.50	ug/L
7440-66-6	Zinc	10.0U	40.0	10.0	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300904	**MWQ-22**	Water	04/30/2014 08:41	05/01/2014 10:00

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/01/2014 13:00	531448	EPA 3010A	50	05/08/2014 14:20	BAM	531901

CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	**Sodium**	**338000**	**5000**	**1250**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300904	**MWQ-22**	Water	04/30/2014 08:41	05/01/2014 10:00

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/01/2014 13:00	531447	EPA 7470A Dissolved	1	05/03/2014 17:03	CMB	531620

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.070U	0.20	0.070	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300904	**MWQ-22**	Water	04/30/2014 08:41	05/01/2014 10:00

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/01/2014 13:00	531447	EPA 7470A	1	05/03/2014 16:51	CMB	531620

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.070U	0.20	0.070	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300904	**MWQ-22**	Water	04/30/2014 08:41	05/01/2014 10:00

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/01/2014 14:35	531449	EPA 3005A Dissolved	10	05/08/2014 07:45	BAM	531901

CAS#	Parameter	Result	RDL	MDL	Units
7439-95-4	**Magnesium**	**20400**	**1000**	**250**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300904	**MWQ-22**	Water	04/30/2014 08:41	05/01/2014 10:00

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/01/2014 14:35	531449	EPA 3005A Dissolved	2	05/08/2014 09:02	BAM	531901

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	**Aluminum**	**13.6J**	**40.0**	**10.0**	**ug/L**
7440-36-0	Antimony	1.00U	4.00	1.00	ug/L
7440-38-2	Arsenic	0.50U	2.00	0.50	ug/L
7440-39-3	**Barium**	**37.0**	**2.00**	**0.50**	**ug/L**
7440-41-7	Beryllium	0.50U	2.00	0.50	ug/L
7440-43-9	Cadmium	0.50U	2.00	0.50	ug/L
7440-70-2	**Calcium**	**50700**	**1000**	**250**	**ug/L**
7440-47-3	Chromium	0.50U	2.00	0.50	ug/L
7440-48-4	Cobalt	0.50U	2.00	0.50	ug/L
7440-50-8	Copper	0.50U	2.00	0.50	ug/L
7439-89-6	**Iron**	**345**	**200**	**50.0**	**ug/L**
7439-92-1	Lead	0.50U	2.00	0.50	ug/L
7439-96-5	**Manganese**	**148**	**10.0**	**2.50**	**ug/L**
7439-98-7	**Molybdenum**	**12.8**	**2.00**	**0.50**	**ug/L**
7440-02-0	Nickel	1.00U	4.00	1.00	ug/L
7440-09-7	**Potassium**	**3080**	**200**	**50.0**	**ug/L**
7782-49-2	**Selenium**	**0.84J**	**2.00**	**0.50**	**ug/L**
7440-22-4	Silver	0.50U	2.00	0.50	ug/L
7440-28-0	Thallium	0.50U	2.00	0.50	ug/L
7440-32-6	Titanium	0.50U	2.00	0.50	ug/L
7440-62-2	Vanadium	0.50U	2.00	0.50	ug/L
7440-66-6	Zinc	10.0U	40.0	10.0	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300904	**MWQ-22**	Water	04/30/2014 08:41	05/01/2014 10:00

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/01/2014 14:35	531449	EPA 3005A Dissolved	50	05/08/2014 14:59	BAM	531901

CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	**Sodium**	**304000**	**5000**	**1250**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300904	**MWQ-22**	Water	04/30/2014 08:41	05/01/2014 10:00

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/01/2014 15:49	JRM	531426

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	**Total Dissolved Solids(TDS)**	**920**	**10.0**	**4.39**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300904	**MWQ-22**	Water	04/30/2014 08:41	05/01/2014 10:00

EPA 353.2 Rev. 2

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/01/2014 16:12	DMT	531469

CAS#	Parameter	Result	RDL	MDL	Units
14797-65-0	Nitrite	0.006U	0.010	0.006	mg/L-N

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300904	**MWQ-22**	Water	04/30/2014 08:41	05/01/2014 10:00

EPA 353.2 Rev. 2

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/01/2014 15:56	DMT	531468

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	0.008U	0.010	0.008	mg/L-N

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300904	**MWQ-22**	Water	04/30/2014 08:41	05/01/2014 10:00

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			100	05/03/2014 18:59	AEL	531586

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	**Chloride**	**388**	**20.0**	**5.00**	**mg/L**
14808-79-8	**Sulfate**	**242**	**20.0**	**5.00**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300904	**MWQ-22**	Water	04/30/2014 08:41	05/01/2014 10:00

SM 2320 B-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/02/2014 13:28	DJH	531554

CAS#	Parameter	Result	RDL	MDL	Units
000000-00-5	**Total Alkalinity**	**177**	**1.0**	**0.26**	**mg/L CaCO3**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300904	**MWQ-22**	Water	04/30/2014 08:41	05/01/2014 10:00

EPA 9012B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/02/2014 12:20	531527	Cyanide Prep	1	05/04/2014 11:19	AEL	531627

CAS#	Parameter	Result	RDL	MDL	Units
57-12-5	**Cyanide**	**0.00080J**	**0.0050**	**0.00050**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300905	**MWQ-22-a**	Water	04/30/2014 08:41	05/01/2014 10:00

Subcontract Data

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/20/2014 14:59	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-000	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300905	**MWQ-22-a**	Water	04/30/2014 08:41	05/01/2014 10:00

Subcontract Data

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/20/2014 15:00	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-001	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300905	**MWQ-22-a**	Water	04/30/2014 08:41	05/01/2014 10:00

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/01/2014 13:00	531448	EPA 3010A	10	05/08/2014 04:42	BAM	531901

CAS#	Parameter	Result	RDL	MDL	Units
7439-95-4	**Magnesium**	**21400**	**1000**	**250**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300905	**MWQ-22-a**	Water	04/30/2014 08:41	05/01/2014 10:00

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/01/2014 13:00	531448	EPA 3010A	2	05/08/2014 04:52	BAM	531901

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	**Aluminum**	**20.2J**	**40.0**	**10.0**	**ug/L**
7440-36-0	Antimony	1.00U	4.00	1.00	ug/L
7440-38-2	Arsenic	0.50U	2.00	0.50	ug/L
7440-39-3	**Barium**	**37.3**	**2.00**	**0.50**	**ug/L**
7440-41-7	Beryllium	0.50U	2.00	0.50	ug/L
7440-43-9	Cadmium	0.50U	2.00	0.50	ug/L
7440-70-2	**Calcium**	**51500**	**1000**	**250**	**ug/L**
7440-47-3	Chromium	0.50U	2.00	0.50	ug/L
7440-48-4	Cobalt	0.50U	2.00	0.50	ug/L
7440-50-8	Copper	0.50U	2.00	0.50	ug/L
7439-89-6	**Iron**	**368**	**200**	**50.0**	**ug/L**
7439-92-1	Lead	0.50U	2.00	0.50	ug/L
7439-96-5	**Manganese**	**152**	**10.0**	**2.50**	**ug/L**
7439-98-7	**Molybdenum**	**13.1**	**2.00**	**0.50**	**ug/L**
7440-02-0	Nickel	1.00U	4.00	1.00	ug/L
7440-09-7	**Potassium**	**3140**	**200**	**50.0**	**ug/L**
7782-49-2	**Selenium**	**0.78J**	**2.00**	**0.50**	**ug/L**
7440-22-4	Silver	0.50U	2.00	0.50	ug/L
7440-28-0	Thallium	0.50U	2.00	0.50	ug/L
7440-32-6	Titanium	0.50U	2.00	0.50	ug/L
7440-62-2	Vanadium	0.50U	2.00	0.50	ug/L
7440-66-6	Zinc	10.0U	40.0	10.0	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300905	**MWQ-22-a**	Water	04/30/2014 08:41	05/01/2014 10:00

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/01/2014 13:00	531448	EPA 3010A	50	05/08/2014 15:09	BAM	531901

CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	**Sodium**	**358000**	**5000**	**1250**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300905	**MWQ-22-a**	Water	04/30/2014 08:41	05/01/2014 10:00

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/01/2014 13:00	531447	EPA 7470A Dissolved	1	05/03/2014 17:05	CMB	531620

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.070U	0.20	0.070	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300905	**MWQ-22-a**	Water	04/30/2014 08:41	05/01/2014 10:00

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/01/2014 13:00	531447	EPA 7470A	1	05/03/2014 16:56	CMB	531620

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.070U	0.20	0.070	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300905	**MWQ-22-a**	Water	04/30/2014 08:41	05/01/2014 10:00

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/01/2014 14:35	531449	EPA 3005A Dissolved	10	05/08/2014 08:53	BAM	531901

CAS#	Parameter	Result	RDL	MDL	Units
7439-95-4	**Magnesium**	**20700**	**1000**	**250**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300905	**MWQ-22-a**	Water	04/30/2014 08:41	05/01/2014 10:00

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/01/2014 14:35	531449	EPA 3005A Dissolved	2	05/08/2014 09:12	BAM	531901

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	**Aluminum**	**13.6J**	**40.0**	**10.0**	**ug/L**
7440-36-0	Antimony	1.00U	4.00	1.00	ug/L
7440-38-2	Arsenic	0.50U	2.00	0.50	ug/L
7440-39-3	**Barium**	**36.9**	**2.00**	**0.50**	**ug/L**
7440-41-7	Beryllium	0.50U	2.00	0.50	ug/L
7440-43-9	Cadmium	0.50U	2.00	0.50	ug/L
7440-70-2	**Calcium**	**50700**	**1000**	**250**	**ug/L**
7440-47-3	Chromium	0.50U	2.00	0.50	ug/L
7440-48-4	Cobalt	0.50U	2.00	0.50	ug/L
7440-50-8	Copper	0.50U	2.00	0.50	ug/L
7439-89-6	**Iron**	**345**	**200**	**50.0**	**ug/L**
7439-92-1	Lead	0.50U	2.00	0.50	ug/L
7439-96-5	**Manganese**	**150**	**10.0**	**2.50**	**ug/L**
7439-98-7	**Molybdenum**	**13.2**	**2.00**	**0.50**	**ug/L**
7440-02-0	Nickel	1.00U	4.00	1.00	ug/L
7440-09-7	**Potassium**	**3090**	**200**	**50.0**	**ug/L**
7782-49-2	**Selenium**	**0.81J**	**2.00**	**0.50**	**ug/L**
7440-22-4	Silver	0.50U	2.00	0.50	ug/L
7440-28-0	Thallium	0.50U	2.00	0.50	ug/L
7440-32-6	Titanium	0.50U	2.00	0.50	ug/L
7440-62-2	Vanadium	0.50U	2.00	0.50	ug/L
7440-66-6	Zinc	10.0U	40.0	10.0	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300905	**MWQ-22-a**	Water	04/30/2014 08:41	05/01/2014 10:00

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/01/2014 14:35	531449	EPA 3005A Dissolved	50	05/08/2014 15:19	BAM	531901

CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	**Sodium**	**309000**	**5000**	**1250**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300905	**MWQ-22-a**	Water	04/30/2014 08:41	05/01/2014 10:00

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/01/2014 15:49	JRM	531426

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	**Total Dissolved Solids(TDS)**	**1060**	**10.0**	**4.39**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300905	**MWQ-22-a**	Water	04/30/2014 08:41	05/01/2014 10:00

EPA 353.2 Rev. 2

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/01/2014 16:13	DMT	531469

CAS#	Parameter	Result	RDL	MDL	Units
14797-65-0	Nitrite	0.006U	0.010	0.006	mg/L-N

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300905	**MWQ-22-a**	Water	04/30/2014 08:41	05/01/2014 10:00

EPA 353.2 Rev. 2

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/01/2014 15:57	DMT	531468

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	0.008U	0.010	0.008	mg/L-N

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300905	**MWQ-22-a**	Water	04/30/2014 08:41	05/01/2014 10:00

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			100	05/03/2014 19:51	AEL	531586

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	**Chloride**	**381**	**20.0**	**5.00**	**mg/L**
14808-79-8	**Sulfate**	**240**	**20.0**	**5.00**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300905	**MWQ-22-a**	Water	04/30/2014 08:41	05/01/2014 10:00

SM 2320 B-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/02/2014 13:28	DJH	531554

CAS#	Parameter	Result	RDL	MDL	Units
000000-00-5	**Total Alkalinity**	**178**	**1.0**	**0.26**	**mg/L CaCO3**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300905	**MWQ-22-a**	Water	04/30/2014 08:41	05/01/2014 10:00

EPA 9012B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/02/2014 12:20	531527	Cyanide Prep	1	05/04/2014 11:19	AEL	531627

CAS#	Parameter	Result	RDL	MDL	Units
57-12-5	**Cyanide**	**0.0034J**	**0.0050**	**0.00050**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300906	**MWQ-2**	Water	04/30/2014 10:46	05/01/2014 10:00

Subcontract Data

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/20/2014 15:00	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-000	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300906	**MWQ-2**	Water	04/30/2014 10:46	05/01/2014 10:00

Subcontract Data

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/20/2014 15:00	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-001	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300906	**MWQ-2**	Water	04/30/2014 10:46	05/01/2014 10:00

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/01/2014 13:00	531448	EPA 3010A	500	05/08/2014 05:11	BAM	531901

CAS#	Parameter	Result	RDL	MDL	Units
7439-95-4	**Magnesium**	**132000**	**50000**	**12500**	**ug/L**
7440-23-5	**Sodium**	**2190000**	**50000**	**12500**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300906	**MWQ-2**	Water	04/30/2014 10:46	05/01/2014 10:00

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/01/2014 13:00	531448	EPA 3010A	10	05/08/2014 06:28	BAM	531901

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	50.0U	200	50.0	ug/L
7440-36-0	Antimony	5.00U	20.0	5.00	ug/L
7440-38-2	Arsenic	2.50U	10.0	2.50	ug/L
7440-39-3	**Barium**	**27.4**	**10.0**	**2.50**	**ug/L**
7440-41-7	Beryllium	2.50U	10.0	2.50	ug/L
7440-43-9	Cadmium	2.50U	10.0	2.50	ug/L
7440-70-2	**Calcium**	**238000**	**5000**	**1250**	**ug/L**
7440-47-3	Chromium	2.50U	10.0	2.50	ug/L
7440-48-4	Cobalt	2.50U	10.0	2.50	ug/L
7440-50-8	Copper	2.50U	10.0	2.50	ug/L
7439-89-6	Iron	250U	1000	250	ug/L
7439-92-1	Lead	2.50U	10.0	2.50	ug/L
7439-96-5	**Manganese**	**194**	**50.0**	**12.5**	**ug/L**
7439-98-7	**Molybdenum**	**20.5**	**10.0**	**2.50**	**ug/L**
7440-02-0	Nickel	5.00U	20.0	5.00	ug/L
7440-09-7	**Potassium**	**8560**	**1000**	**250**	**ug/L**
7782-49-2	**Selenium**	**3.39J**	**10.0**	**2.50**	**ug/L**
7440-22-4	Silver	2.50U	10.0	2.50	ug/L
7440-28-0	Thallium	2.50U	10.0	2.50	ug/L
7440-32-6	Titanium	2.50U	10.0	2.50	ug/L
7440-62-2	Vanadium	2.50U	10.0	2.50	ug/L
7440-66-6	**Zinc**	**442**	**200**	**50.0**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300906	**MWQ-2**	Water	04/30/2014 10:46	05/01/2014 10:00

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/01/2014 13:00	531447	EPA 7470A Dissolved	1	05/03/2014 16:58	CMB	531620

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.070U	0.20	0.070	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300906	**MWQ-2**	Water	04/30/2014 10:46	05/01/2014 10:00

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/01/2014 13:00	531447	EPA 7470A	1	05/03/2014 16:45	CMB	531620

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.070U	0.20	0.070	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300906	**MWQ-2**	Water	04/30/2014 10:46	05/01/2014 10:00

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/01/2014 14:35	531449	EPA 3005A Dissolved	500	05/08/2014 11:27	BAM	531901

CAS#	Parameter	Result	RDL	MDL	Units
7439-95-4	**Magnesium**	**134000**	**50000**	**12500**	**ug/L**
7440-23-5	**Sodium**	**2200000**	**50000**	**12500**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300906	**MWQ-2**	Water	04/30/2014 10:46	05/01/2014 10:00

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/01/2014 14:35	531449	EPA 3005A Dissolved	10	05/08/2014 12:54	BAM	531901

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	50.0U	200	50.0	ug/L
7440-36-0	Antimony	5.00U	20.0	5.00	ug/L
7440-38-2	Arsenic	2.50U	10.0	2.50	ug/L
7440-39-3	**Barium**	**27.4**	**10.0**	**2.50**	**ug/L**
7440-41-7	Beryllium	2.50U	10.0	2.50	ug/L
7440-43-9	Cadmium	2.50U	10.0	2.50	ug/L
7440-70-2	**Calcium**	**236000**	**5000**	**1250**	**ug/L**
7440-47-3	Chromium	2.50U	10.0	2.50	ug/L
7440-48-4	Cobalt	2.50U	10.0	2.50	ug/L
7440-50-8	Copper	2.50U	10.0	2.50	ug/L
7439-89-6	Iron	250U	1000	250	ug/L
7439-92-1	Lead	2.50U	10.0	2.50	ug/L
7439-96-5	**Manganese**	**194**	**50.0**	**12.5**	**ug/L**
7439-98-7	**Molybdenum**	**19.5**	**10.0**	**2.50**	**ug/L**
7440-02-0	Nickel	5.00U	20.0	5.00	ug/L
7440-09-7	**Potassium**	**8520**	**1000**	**250**	**ug/L**
7782-49-2	**Selenium**	**4.22J**	**10.0**	**2.50**	**ug/L**
7440-22-4	Silver	2.50U	10.0	2.50	ug/L
7440-28-0	Thallium	2.50U	10.0	2.50	ug/L
7440-32-6	Titanium	2.50U	10.0	2.50	ug/L
7440-62-2	Vanadium	2.50U	10.0	2.50	ug/L
7440-66-6	**Zinc**	**440**	**200**	**50.0**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300906	**MWQ-2**	Water	04/30/2014 10:46	05/01/2014 10:00

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/01/2014 15:49	JRM	531426

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	**Total Dissolved Solids(TDS)**	**6500**	**10.0**	**4.39**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300906	**MWQ-2**	Water	04/30/2014 10:46	05/01/2014 10:00

EPA 353.2 Rev. 2

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/01/2014 16:14	DMT	531469

CAS#	Parameter	Result	RDL	MDL	Units
14797-65-0	Nitrite	0.006U	0.010	0.006	mg/L-N

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300906	**MWQ-2**	Water	04/30/2014 10:46	05/01/2014 10:00

EPA 353.2 Rev. 2

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/01/2014 15:58	DMT	531468

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	**Nitrate**	**0.157**	**0.010**	**0.008**	**mg/L-N**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300906	**MWQ-2**	Water	04/30/2014 10:46	05/01/2014 10:00

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			2000	05/03/2014 20:09	AEL	531586

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	**Chloride**	**3440**	**400**	**100**	**mg/L**
14808-79-8	**Sulfate**	**1430**	**400**	**100**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300906	**MWQ-2**	Water	04/30/2014 10:46	05/01/2014 10:00

SM 2320 B-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/02/2014 13:28	DJH	531554

CAS#	Parameter	Result	RDL	MDL	Units
000000-00-5	**Total Alkalinity**	**95.9**	**1.0**	**0.26**	**mg/L CaCO3**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300906	**MWQ-2**	Water	04/30/2014 10:46	05/01/2014 10:00

EPA 9012B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/02/2014 12:20	531527	Cyanide Prep	1	05/04/2014 11:20	AEL	531627

CAS#	Parameter	Result	RDL	MDL	Units
57-12-5	**Cyanide**	**0.0040J**	**0.0050**	**0.00050**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300907	**MWQ-2-ms**	Water	04/30/2014 10:46	05/01/2014 10:00

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/20/2014 15:00	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-000	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300907	**MWQ-2-ms**	Water	04/30/2014 10:46	05/01/2014 10:00

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/20/2014 15:00	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-001	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300907	**MWQ-2-ms**	Water	04/30/2014 10:46	05/01/2014 10:00

SW-846 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/01/2014 13:00	531448	EPA 3010A	500	05/08/2014 05:21	BAM	531901

CAS#	Parameter	Result	RDL	MDL	Units
7439-95-4	**Magnesium**	**137000**	**50000**	**12500**	**ug/L**
7440-23-5	**Sodium**	**2170000**	**50000**	**12500**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300907	**MWQ-2-ms**	Water	04/30/2014 10:46	05/01/2014 10:00

SW-846 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/01/2014 13:00	531448	EPA 3010A	10	05/08/2014 06:38	BAM	531901

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	1090	200	50.0	ug/L
7440-36-0	Antimony	115	20.0	5.00	ug/L
7440-38-2	Arsenic	51.3	10.0	2.50	ug/L
7440-39-3	Barium	81.3	10.0	2.50	ug/L
7440-41-7	Beryllium	46.0	10.0	2.50	ug/L
7440-43-9	Cadmium	50.6	10.0	2.50	ug/L
7440-70-2	Calcium	263000	5000	1250	ug/L
7440-47-3	Chromium	49.1	10.0	2.50	ug/L
7440-48-4	Cobalt	48.7	10.0	2.50	ug/L
7440-50-8	Copper	48.7	10.0	2.50	ug/L
7439-89-6	Iron	4930	1000	250	ug/L
7439-92-1	Lead	49.3	10.0	2.50	ug/L
7439-96-5	Manganese	277	50.0	12.5	ug/L
7439-98-7	Molybdenum	72.2	10.0	2.50	ug/L
7440-02-0	Nickel	96.8	20.0	5.00	ug/L
7440-09-7	Potassium	13800	1000	250	ug/L
7782-49-2	Selenium	13.8	10.0	2.50	ug/L
7440-22-4	Silver	34.8	10.0	2.50	ug/L
7440-28-0	Thallium	44.1	10.0	2.50	ug/L
7440-32-6	Titanium	51.2	10.0	2.50	ug/L
7440-62-2	Vanadium	51.9	10.0	2.50	ug/L
7440-66-6	Zinc	1380	200	50.0	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300907	**MWQ-2-ms**	Water	04/30/2014 10:46	05/01/2014 10:00

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/01/2014 13:00	531447	EPA 7470A Dissolved	1	05/03/2014 17:00	CMB	531620

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	**Mercury**	**2.84**	**0.20**	**0.070**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300907	**MWQ-2-ms**	Water	04/30/2014 10:46	05/01/2014 10:00

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/01/2014 13:00	531447	EPA 7470A	1	05/03/2014 16:47	CMB	531620

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	**Mercury**	**2.89**	**0.20**	**0.070**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300907	**MWQ-2-ms**	Water	04/30/2014 10:46	05/01/2014 10:00

SW-846 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/01/2014 14:35	531449	EPA 3005A Dissolved	500	05/08/2014 11:36	BAM	531901

CAS#	Parameter	Result	RDL	MDL	Units
7439-95-4	**Magnesium**	**134000**	**50000**	**12500**	**ug/L**
7440-23-5	**Sodium**	**2130000**	**50000**	**12500**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300907	**MWQ-2-ms**	Water	04/30/2014 10:46	05/01/2014 10:00

SW-846 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/01/2014 14:35	531449	EPA 3005A Dissolved	10	05/08/2014 13:03	BAM	531901

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	1010	200	50.0	ug/L
7440-36-0	Antimony	115	20.0	5.00	ug/L
7440-38-2	Arsenic	50.7	10.0	2.50	ug/L
7440-39-3	Barium	81.8	10.0	2.50	ug/L
7440-41-7	Beryllium	45.2	10.0	2.50	ug/L
7440-43-9	Cadmium	50.5	10.0	2.50	ug/L
7440-70-2	Calcium	259000	5000	1250	ug/L
7440-47-3	Chromium	47.9	10.0	2.50	ug/L
7440-48-4	Cobalt	47.4	10.0	2.50	ug/L
7440-50-8	Copper	47.0	10.0	2.50	ug/L
7439-89-6	Iron	4760	1000	250	ug/L
7439-92-1	Lead	48.4	10.0	2.50	ug/L
7439-96-5	Manganese	238	50.0	12.5	ug/L
7439-98-7	Molybdenum	71.1	10.0	2.50	ug/L
7440-02-0	Nickel	94.1	20.0	5.00	ug/L
7440-09-7	Potassium	13700	1000	250	ug/L
7782-49-2	Selenium	13.9	10.0	2.50	ug/L
7440-22-4	Silver	29.0	10.0	2.50	ug/L
7440-28-0	Thallium	43.5	10.0	2.50	ug/L
7440-32-6	Titanium	50.0	10.0	2.50	ug/L
7440-62-2	Vanadium	50.8	10.0	2.50	ug/L
7440-66-6	Zinc	1350	200	50.0	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300907	**MWQ-2-ms**	Water	04/30/2014 10:46	05/01/2014 10:00

EPA 353.2 Nitrite

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/01/2014 16:15	DMT	531469

CAS#	Parameter	Result	RDL	MDL	Units
14797-65-0	**Nitrite**	**0.536**	**0.010**	**0.006**	**mg/L-N**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300907	**MWQ-2-ms**	Water	04/30/2014 10:46	05/01/2014 10:00

EPA 353.2 Nitrate

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/01/2014 15:59	DMT	531468

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	**Nitrate**	**0.660**	**0.010**	**0.008**	**mg/L-N**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300907	**MWQ-2-ms**	Water	04/30/2014 10:46	05/01/2014 10:00

EPA 300.0 Inorganic Anions

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			2000	05/03/2014 20:27	AEL	531586

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	**Chloride**	**8630**	**400**	**100**	**mg/L**
14808-79-8	**Sulfate**	**6520**	**400**	**100**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300907	**MWQ-2-ms**	Water	04/30/2014 10:46	05/01/2014 10:00

SW-846 9012B Cyanide Water

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/02/2014 12:20	531527	Cyanide Prep	1	05/04/2014 11:21	AEL	531627

CAS#	Parameter	Result	RDL	MDL	Units
57-12-5	**Cyanide**	**0.084**	**0.0050**	**0.00050**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300908	**MWQ-2-sd**	Water	04/30/2014 10:46	05/01/2014 10:00

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/20/2014 15:01	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-000	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300908	**MWQ-2-sd**	Water	04/30/2014 10:46	05/01/2014 10:00

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/20/2014 15:01	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-001	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300908	**MWQ-2-sd**	Water	04/30/2014 10:46	05/01/2014 10:00

SW-846 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/01/2014 13:00	531448	EPA 3010A	500	05/08/2014 05:30	BAM	531901

CAS#	Parameter	Result	RDL	MDL	Units
7439-95-4	**Magnesium**	**137000**	**50000**	**12500**	**ug/L**
7440-23-5	**Sodium**	**2180000**	**50000**	**12500**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300908	**MWQ-2-sd**	Water	04/30/2014 10:46	05/01/2014 10:00

SW-846 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/01/2014 13:00	531448	EPA 3010A	10	05/08/2014 06:47	BAM	531901

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	1010	200	50.0	ug/L
7440-36-0	Antimony	112	20.0	5.00	ug/L
7440-38-2	Arsenic	49.5	10.0	2.50	ug/L
7440-39-3	Barium	80.3	10.0	2.50	ug/L
7440-41-7	Beryllium	48.7	10.0	2.50	ug/L
7440-43-9	Cadmium	49.1	10.0	2.50	ug/L
7440-70-2	Calcium	261000	5000	1250	ug/L
7440-47-3	Chromium	47.2	10.0	2.50	ug/L
7440-48-4	Cobalt	46.7	10.0	2.50	ug/L
7440-50-8	Copper	45.8	10.0	2.50	ug/L
7439-89-6	Iron	4700	1000	250	ug/L
7439-92-1	Lead	47.3	10.0	2.50	ug/L
7439-96-5	Manganese	240	50.0	12.5	ug/L
7439-98-7	Molybdenum	71.3	10.0	2.50	ug/L
7440-02-0	Nickel	93.6	20.0	5.00	ug/L
7440-09-7	Potassium	13500	1000	250	ug/L
7782-49-2	Selenium	12.6	10.0	2.50	ug/L
7440-22-4	Silver	35.3	10.0	2.50	ug/L
7440-28-0	Thallium	43.4	10.0	2.50	ug/L
7440-32-6	Titanium	47.3	10.0	2.50	ug/L
7440-62-2	Vanadium	50.5	10.0	2.50	ug/L
7440-66-6	Zinc	1340	200	50.0	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300908	**MWQ-2-sd**	Water	04/30/2014 10:46	05/01/2014 10:00

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/01/2014 13:00	531447	EPA 7470A Dissolved	1	05/03/2014 17:02	CMB	531620

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	**Mercury**	**2.93**	**0.20**	**0.070**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300908	**MWQ-2-sd**	Water	04/30/2014 10:46	05/01/2014 10:00

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/01/2014 13:00	531447	EPA 7470A	1	05/03/2014 16:49	CMB	531620

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	**Mercury**	**2.71**	**0.20**	**0.070**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300908	**MWQ-2-sd**	Water	04/30/2014 10:46	05/01/2014 10:00

SW-846 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/01/2014 14:35	531449	EPA 3005A Dissolved	500	05/08/2014 11:46	BAM	531901

CAS#	Parameter	Result	RDL	MDL	Units
7439-95-4	**Magnesium**	**135000**	**50000**	**12500**	**ug/L**
7440-23-5	**Sodium**	**2150000**	**50000**	**12500**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300908	**MWQ-2-sd**	Water	04/30/2014 10:46	05/01/2014 10:00

SW-846 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/01/2014 14:35	531449	EPA 3005A Dissolved	10	05/08/2014 13:13	BAM	531901

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	1040	200	50.0	ug/L
7440-36-0	Antimony	111	20.0	5.00	ug/L
7440-38-2	Arsenic	48.2	10.0	2.50	ug/L
7440-39-3	Barium	78.7	10.0	2.50	ug/L
7440-41-7	Beryllium	44.3	10.0	2.50	ug/L
7440-43-9	Cadmium	48.8	10.0	2.50	ug/L
7440-70-2	Calcium	258000	5000	1250	ug/L
7440-47-3	Chromium	46.7	10.0	2.50	ug/L
7440-48-4	Cobalt	45.9	10.0	2.50	ug/L
7440-50-8	Copper	45.2	10.0	2.50	ug/L
7439-89-6	Iron	4660	1000	250	ug/L
7439-92-1	Lead	46.9	10.0	2.50	ug/L
7439-96-5	Manganese	238	50.0	12.5	ug/L
7439-98-7	Molybdenum	70.5	10.0	2.50	ug/L
7440-02-0	Nickel	91.4	20.0	5.00	ug/L
7440-09-7	Potassium	13500	1000	250	ug/L
7782-49-2	Selenium	13.7	10.0	2.50	ug/L
7440-22-4	Silver	28.6	10.0	2.50	ug/L
7440-28-0	Thallium	42.8	10.0	2.50	ug/L
7440-32-6	Titanium	46.3	10.0	2.50	ug/L
7440-62-2	Vanadium	49.3	10.0	2.50	ug/L
7440-66-6	Zinc	1350	200	50.0	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300908	**MWQ-2-sd**	Water	04/30/2014 10:46	05/01/2014 10:00

EPA 353.2 Nitrite

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/01/2014 16:17	DMT	531469

CAS#	Parameter	Result	RDL	MDL	Units
14797-65-0	**Nitrite**	**0.537**	**0.010**	**0.006**	**mg/L-N**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300908	**MWQ-2-sd**	Water	04/30/2014 10:46	05/01/2014 10:00

EPA 353.2 Nitrate

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/01/2014 16:00	DMT	531468

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	**Nitrate**	**0.655**	**0.010**	**0.008**	**mg/L-N**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300908	**MWQ-2-sd**	Water	04/30/2014 10:46	05/01/2014 10:00

EPA 300.0 Inorganic Anions

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			2000	05/03/2014 20:44	AEL	531586

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	**Chloride**	**8740**	**400**	**100**	**mg/L**
14808-79-8	**Sulfate**	**6500**	**400**	**100**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300908	**MWQ-2-sd**	Water	04/30/2014 10:46	05/01/2014 10:00

SW-846 9012B Cyanide Water

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/02/2014 12:20	531527	Cyanide Prep	1	05/04/2014 11:22	AEL	531627

CAS#	Parameter	Result	RDL	MDL	Units
57-12-5	**Cyanide**	**0.086**	**0.0050**	**0.00050**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300909	**MWQ-14**	Water	05/01/2014 07:51	05/02/2014 10:00

Subcontract Data

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/20/2014 15:01	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-000	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300909	**MWQ-14**	Water	05/01/2014 07:51	05/02/2014 10:00

Subcontract Data

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/20/2014 15:01	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-001	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300909	**MWQ-14**	Water	05/01/2014 07:51	05/02/2014 10:00

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/05/2014 11:40	531670	EPA 3010A	100	05/09/2014 00:47	CMB	532028

CAS#	Parameter	Result	RDL	MDL	Units
7439-95-4	**Magnesium**	**70400**	**10000**	**2500**	**ug/L**
7440-23-5	**Sodium**	**784000**	**10000**	**2500**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300909	**MWQ-14**	Water	05/01/2014 07:51	05/02/2014 10:00

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/05/2014 11:40	531670	EPA 3010A	5	05/09/2014 00:57	CMB	532028

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	**Aluminum**	**26.6J**	**100**	**25.0**	**ug/L**
7440-36-0	Antimony	2.50U	10.0	2.50	ug/L
7440-38-2	**Arsenic**	**1.42J**	**5.00**	**1.25**	**ug/L**
7440-39-3	**Barium**	**13.4**	**5.00**	**1.25**	**ug/L**
7440-41-7	Beryllium	1.25U	5.00	1.25	ug/L
7440-43-9	Cadmium	1.25U	5.00	1.25	ug/L
7440-70-2	**Calcium**	**85200**	**2500**	**625**	**ug/L**
7440-47-3	Chromium	1.25U	5.00	1.25	ug/L
7440-48-4	Cobalt	1.25U	5.00	1.25	ug/L
7440-50-8	Copper	1.25U	5.00	1.25	ug/L
7439-89-6	Iron	125U	500	125	ug/L
7439-92-1	Lead	1.25U	5.00	1.25	ug/L
7439-96-5	Manganese	6.25U	25.0	6.25	ug/L
7439-98-7	**Molybdenum**	**26.6**	**5.00**	**1.25**	**ug/L**
7440-02-0	**Nickel**	**15.6**	**10.0**	**2.50**	**ug/L**
7440-09-7	**Potassium**	**11800**	**500**	**125**	**ug/L**
7782-49-2	**Selenium**	**25.1**	**5.00**	**1.25**	**ug/L**
7440-22-4	Silver	1.25U	5.00	1.25	ug/L
7440-28-0	Thallium	1.25U	5.00	1.25	ug/L
7440-32-6	Titanium	1.25U	5.00	1.25	ug/L
7440-62-2	**Vanadium**	**6.57**	**5.00**	**1.25**	**ug/L**
7440-66-6	**Zinc**	**27.7J**	**100**	**25.0**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300909	**MWQ-14**	Water	05/01/2014 07:51	05/02/2014 10:00

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/05/2014 12:15	531688	EPA 7470A Dissolved	1	05/06/2014 13:29	BAM	531788

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.070U	0.20	0.070	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300909	**MWQ-14**	Water	05/01/2014 07:51	05/02/2014 10:00

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/05/2014 12:15	531688	EPA 7470A	1	05/06/2014 13:27	BAM	531788

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.070U	0.20	0.070	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300909	**MWQ-14**	Water	05/01/2014 07:51	05/02/2014 10:00

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/06/2014 15:10	531722	EPA 3005A Dissolved	100	05/08/2014 22:15	CMB	532028

CAS#	Parameter	Result	RDL	MDL	Units
7439-95-4	**Magnesium**	**65300**	**10000**	**2500**	**ug/L**
7440-23-5	**Sodium**	**726000**	**10000**	**2500**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300909	**MWQ-14**	Water	05/01/2014 07:51	05/02/2014 10:00

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/06/2014 15:10	531722	EPA 3005A Dissolved	5	05/08/2014 22:53	CMB	532028

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	25.0U	100	25.0	ug/L
7440-36-0	Antimony	2.50U	10.0	2.50	ug/L
7440-38-2	**Arsenic**	**1.41J**	**5.00**	**1.25**	**ug/L**
7440-39-3	**Barium**	**11.9**	**5.00**	**1.25**	**ug/L**
7440-41-7	Beryllium	1.25U	5.00	1.25	ug/L
7440-43-9	Cadmium	1.25U	5.00	1.25	ug/L
7440-70-2	**Calcium**	**78200**	**2500**	**625**	**ug/L**
7440-47-3	Chromium	1.25U	5.00	1.25	ug/L
7440-48-4	Cobalt	1.25U	5.00	1.25	ug/L
7440-50-8	Copper	1.25U	5.00	1.25	ug/L
7439-89-6	Iron	125U	500	125	ug/L
7439-92-1	Lead	1.25U	5.00	1.25	ug/L
7439-96-5	Manganese	6.25U	25.0	6.25	ug/L
7439-98-7	**Molybdenum**	**24.1**	**5.00**	**1.25**	**ug/L**
7440-02-0	**Nickel**	**14.3**	**10.0**	**2.50**	**ug/L**
7440-09-7	**Potassium**	**10800**	**500**	**125**	**ug/L**
7782-49-2	**Selenium**	**24.1**	**5.00**	**1.25**	**ug/L**
7440-22-4	Silver	1.25U	5.00	1.25	ug/L
7440-28-0	Thallium	1.25U	5.00	1.25	ug/L
7440-32-6	Titanium	1.25U	5.00	1.25	ug/L
7440-62-2	**Vanadium**	**5.95**	**5.00**	**1.25**	**ug/L**
7440-66-6	**Zinc**	**26.2J**	**100**	**25.0**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300909	**MWQ-14**	Water	05/01/2014 07:51	05/02/2014 10:00

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/05/2014 15:50	JRM	531699

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	**Total Dissolved Solids(TDS)**	**2720**	**10.0**	**4.39**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300909	**MWQ-14**	Water	05/01/2014 07:51	05/02/2014 10:00

EPA 353.2 Rev. 2

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/02/2014 17:55	AEL	531568

CAS#	Parameter	Result	RDL	MDL	Units
14797-65-0	Nitrite	0.006U	0.010	0.006	mg/L-N

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300909	**MWQ-14**	Water	05/01/2014 07:51	05/02/2014 10:00

EPA 353.2 Rev. 2

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			5	05/02/2014 17:34	AEL	531567

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	**Nitrate**	**1.29**	**0.050**	**0.041**	**mg/L-N**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300909	**MWQ-14**	Water	05/01/2014 07:51	05/02/2014 10:00

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1000	05/04/2014 21:58	AEL	531636

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	**Chloride**	**686**	**200**	**50.0**	**mg/L**
14808-79-8	**Sulfate**	**1030**	**200**	**50.0**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300909	**MWQ-14**	Water	05/01/2014 07:51	05/02/2014 10:00

SM 2320 B-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/08/2014 10:33	DJH	532045

CAS#	Parameter	Result	RDL	MDL	Units
000000-00-5	**Total Alkalinity**	**155**	**1.0**	**0.26**	**mg/L CaCO3**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300909	**MWQ-14**	Water	05/01/2014 07:51	05/02/2014 10:00

EPA 9012B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/02/2014 14:20	531527	Cyanide Prep	1	05/04/2014 11:38	AEL	531627

CAS#	Parameter	Result	RDL	MDL	Units
57-12-5	**Cyanide**	**0.0029J**	**0.0050**	**0.00050**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300910	**MWQ-20**	Water	05/01/2014 10:16	05/02/2014 10:00

Subcontract Data

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/20/2014 15:01	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-000	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300910	**MWQ-20**	Water	05/01/2014 10:16	05/02/2014 10:00

Subcontract Data

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/20/2014 15:01	SMH2	

CAS#	Parameter	Result	RDL	MDL	Units
SHIP-001	Ship Result	*			mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300910	**MWQ-20**	Water	05/01/2014 10:16	05/02/2014 10:00

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/05/2014 11:40	531670	EPA 3010A	500	05/09/2014 01:06	CMB	532028

CAS#	Parameter	Result	RDL	MDL	Units
7439-95-4	**Magnesium**	**383000**	**50000**	**12500**	**ug/L**
7440-23-5	**Sodium**	**3440000**	**50000**	**12500**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300910	**MWQ-20**	Water	05/01/2014 10:16	05/02/2014 10:00

EPA 6020A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/05/2014 11:40	531670	EPA 3010A	20	05/09/2014 01:16	CMB	532028

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	**Aluminum**	**118J**	**400**	**100**	**ug/L**
7440-36-0	Antimony	10.0U	40.0	10.0	ug/L
7440-38-2	Arsenic	5.00U	20.0	5.00	ug/L
7440-39-3	**Barium**	**28.7**	**20.0**	**5.00**	**ug/L**
7440-41-7	Beryllium	5.00U	20.0	5.00	ug/L
7440-43-9	Cadmium	5.00U	20.0	5.00	ug/L
7440-70-2	**Calcium**	**752000**	**10000**	**2500**	**ug/L**
7440-47-3	Chromium	5.00U	20.0	5.00	ug/L
7440-48-4	Cobalt	5.00U	20.0	5.00	ug/L
7440-50-8	Copper	5.00U	20.0	5.00	ug/L
7439-89-6	Iron	500U	2000	500	ug/L
7439-92-1	Lead	5.00U	20.0	5.00	ug/L
7439-96-5	**Manganese**	**975**	**100**	**25.0**	**ug/L**
7439-98-7	**Molybdenum**	**13.0J**	**20.0**	**5.00**	**ug/L**
7440-02-0	Nickel	10.0U	40.0	10.0	ug/L
7440-09-7	**Potassium**	**12800**	**2000**	**500**	**ug/L**
7782-49-2	Selenium	5.00U	20.0	5.00	ug/L
7440-22-4	Silver	5.00U	20.0	5.00	ug/L
7440-28-0	Thallium	5.00U	20.0	5.00	ug/L
7440-32-6	Titanium	5.00U	20.0	5.00	ug/L
7440-62-2	Vanadium	5.00U	20.0	5.00	ug/L
7440-66-6	**Zinc**	**518**	**400**	**100**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300910	**MWQ-20**	Water	05/01/2014 10:16	05/02/2014 10:00

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/05/2014 12:15	531688	EPA 7470A Dissolved	1	05/06/2014 13:32	BAM	531788

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.070U	0.20	0.070	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300910	**MWQ-20**	Water	05/01/2014 10:16	05/02/2014 10:00

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/05/2014 12:15	531688	EPA 7470A	1	05/06/2014 13:31	BAM	531788

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.070U	0.20	0.070	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300910	**MWQ-20**	Water	05/01/2014 10:16	05/02/2014 10:00

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/06/2014 15:10	531722	EPA 3005A Dissolved	500	05/09/2014 00:00	CMB	532028

CAS#	Parameter	Result	RDL	MDL	Units
7439-95-4	**Magnesium**	**348000**	**50000**	**12500**	**ug/L**
7440-23-5	**Sodium**	**3120000**	**50000**	**12500**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300910	**MWQ-20**	Water	05/01/2014 10:16	05/02/2014 10:00

EPA 6020A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/06/2014 15:10	531722	EPA 3005A Dissolved	20	05/09/2014 00:09	CMB	532028

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	100U	400	100	ug/L
7440-36-0	Antimony	10.0U	40.0	10.0	ug/L
7440-38-2	Arsenic	5.00U	20.0	5.00	ug/L
7440-39-3	**Barium**	**24.2**	**20.0**	**5.00**	**ug/L**
7440-41-7	Beryllium	5.00U	20.0	5.00	ug/L
7440-43-9	Cadmium	5.00U	20.0	5.00	ug/L
7440-70-2	**Calcium**	**683000**	**10000**	**2500**	**ug/L**
7440-47-3	Chromium	5.00U	20.0	5.00	ug/L
7440-48-4	Cobalt	5.00U	20.0	5.00	ug/L
7440-50-8	Copper	5.00U	20.0	5.00	ug/L
7439-89-6	Iron	500U	2000	500	ug/L
7439-92-1	Lead	5.00U	20.0	5.00	ug/L
7439-96-5	**Manganese**	**888**	**100**	**25.0**	**ug/L**
7439-98-7	**Molybdenum**	**12.6J**	**20.0**	**5.00**	**ug/L**
7440-02-0	Nickel	10.0U	40.0	10.0	ug/L
7440-09-7	**Potassium**	**11500**	**2000**	**500**	**ug/L**
7782-49-2	Selenium	5.00U	20.0	5.00	ug/L
7440-22-4	Silver	5.00U	20.0	5.00	ug/L
7440-28-0	Thallium	5.00U	20.0	5.00	ug/L
7440-32-6	Titanium	5.00U	20.0	5.00	ug/L
7440-62-2	Vanadium	5.00U	20.0	5.00	ug/L
7440-66-6	**Zinc**	**462**	**400**	**100**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300910	**MWQ-20**	Water	05/01/2014 10:16	05/02/2014 10:00

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/05/2014 15:50	JRM	531699

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	**Total Dissolved Solids(TDS)**	**9870**	**10.0**	**4.39**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300910	**MWQ-20**	Water	05/01/2014 10:16	05/02/2014 10:00

EPA 353.2 Rev. 2

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/02/2014 17:56	AEL	531568

CAS#	Parameter	Result	RDL	MDL	Units
14797-65-0	**Nitrite**	**0.022**	**0.010**	**0.006**	**mg/L-N**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300910	**MWQ-20**	Water	05/01/2014 10:16	05/02/2014 10:00

EPA 353.2 Rev. 2

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/02/2014 17:35	AEL	531567

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	**Nitrate**	**0.030**	**0.010**	**0.008**	**mg/L-N**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300910	**MWQ-20**	Water	05/01/2014 10:16	05/02/2014 10:00

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			2000	05/04/2014 22:15	AEL	531636

CAS#	Parameter	Result	RDL	MDL	Units
16887-00-6	**Chloride**	**6260**	**400**	**100**	**mg/L**
14808-79-8	**Sulfate**	**1840**	**400**	**100**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300910	**MWQ-20**	Water	05/01/2014 10:16	05/02/2014 10:00

SM 2320 B-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/08/2014 10:33	DJH	532045

CAS#	Parameter	Result	RDL	MDL	Units
000000-00-5	**Total Alkalinity**	**76.3**	**1.0**	**0.26**	**mg/L CaCO3**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21404300910	**MWQ-20**	Water	05/01/2014 10:16	05/02/2014 10:00

EPA 9012B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/02/2014 14:20	531527	Cyanide Prep	1	05/04/2014 11:39	AEL	531627

CAS#	Parameter	Result	RDL	MDL	Units
57-12-5	**Cyanide**	**0.0032J**	**0.0050**	**0.00050**	**mg/L**

Inorganics Quality Control Summary

Analytical Batch 531493	**Client ID**	MB531339		LCS531339
Prep Batch 531339	**GCAL ID**	1310843		1310844
Prep Method EPA 3010A	**Sample Type**	Method Blank		LCS
	Prep Date	04/30/2014 12:30		04/30/2014 12:30
	Analytical Date	05/01/2014 18:47		05/01/2014 18:55
	Matrix	Water		Water

EPA 6020A		**Units**	ug/L	**Spike**	**Result**		**Control**
		Result	**RDL**	**Added**		**% R**	**Limits % R**
7429-90-5	Aluminum	5.00U	5.00	1000	1020	102	80 - 120
7440-36-0	Antimony	0.50U	0.50	100	104	104	80 - 120
7440-38-2	Arsenic	0.25U	0.25	50.0	48.0	96	80 - 120
7440-39-3	Barium	0.25U	0.25	50.0	49.5	99	80 - 120
7440-41-7	Beryllium	0.25U	0.25	50.0	50.3	101	80 - 120
7440-43-9	Cadmium	0.25U	0.25	50.0	48.3	97	80 - 120
7440-70-2	Calcium	181J	125	25000	24700	99	80 - 120
7440-47-3	Chromium	0.25U	0.25	50.0	50.5	101	80 - 120
7440-48-4	Cobalt	0.25U	0.25	50.0	51.0	102	80 - 120
7440-50-8	Copper	0.25U	0.25	50.0	50.2	100	80 - 120
7439-89-6	Iron	25.0U	25.0	5000	4890	98	80 - 120
7439-92-1	Lead	0.25U	0.25	50.0	52.0	104	80 - 120
7439-95-4	Magnesium	25.0U	25.0	5000	5170	103	80 - 120
7439-96-5	Manganese	1.25U	1.25	50.0	50.7	101	80 - 120
7439-98-7	Molybdenum	0.25U	0.25	50.0	49.6	99	80 - 120
7440-02-0	Nickel	0.73J	0.50	100	102	102	80 - 120
7440-09-7	Potassium	25.0U	25.0	5000	5070	101	80 - 120
7782-49-2	Selenium	0.25U	0.25	10.0	9.64	96	80 - 120
7440-22-4	Silver	0.25U	0.25	50.0	52.0	104	80 - 120
7440-23-5	Sodium	25.0U	25.0	5000	5080	102	80 - 120
7440-28-0	Thallium	0.25U	0.25	50.0	45.0	90	80 - 120
7440-32-6	Titanium	0.25U	0.25	50.0	47.9	96	80 - 120
7440-62-2	Vanadium	0.25U	0.25	50.0	50.2	100	80 - 120
7440-66-6	Zinc	5.00U	5.00	1000	957	96	80 - 120

Inorganics Quality Control Summary

Analytical Batch	531759	**Client ID**	MWQ-19	1310815MS	1310815MSD
Prep Batch	531339	**GCAL ID**	21404300901	1310845	1310846
Prep Method	EPA 3010A	**Sample Type**	SAMPLE	MS	MSD
		Prep Date	04/30/2014 12:30	04/30/2014 12:30	04/30/2014 12:30
		Analytical Date	05/06/2014 21:07	05/06/2014 21:16	05/06/2014 21:26
		Matrix	Water	Water	Water

EPA 6020A		**Units**	ug/L	**Spike**			**Control**				
		Result	**RDL**	**Added**	**Result**	**% R**	**Limits % R**	**Result**	**% R**	**RPD**	**RPD Limit**
7440-70-2	Calcium	346000	31300	25000	375000	118	80 - 120	365000	**79***	3	20
7439-95-4	Magnesium	185000	6250	5000	188000	**64***	80 - 120	190000	111	1	20
7440-23-5	Sodium	1070000	6250	5000	1060000	**-109***	80 - 120	1080000	**353***	2	20

Analytical Batch	531901	**Client ID**	MB531448	LCS531448
Prep Batch	531448	**GCAL ID**	1311366	1311367
Prep Method	EPA 3010A	**Sample Type**	Method Blank	LCS
		Prep Date	05/01/2014 13:00	05/01/2014 13:00
		Analytical Date	05/08/2014 11:08	05/08/2014 11:17
		Matrix	Water	Water

EPA 6020A		**Units**	ug/L	**Spike**			**Control**
		Result	**RDL**	**Added**	**Result**	**% R**	**Limits % R**
7429-90-5	Aluminum	5.00U	5.00	1000	946	95	80 - 120
7440-36-0	Antimony	0.50U	0.50	100	102	102	80 - 120
7440-38-2	Arsenic	0.25U	0.25	50.0	47.3	95	80 - 120
7440-39-3	Barium	0.25U	0.25	50.0	49.0	98	80 - 120
7440-41-7	Beryllium	0.25U	0.25	50.0	45.9	92	80 - 120
7440-43-9	Cadmium	0.25U	0.25	50.0	46.4	93	80 - 120
7440-70-2	Calcium	125U	125	25000	23700	95	80 - 120
7440-47-3	Chromium	0.25U	0.25	50.0	48.3	97	80 - 120
7440-48-4	Cobalt	0.25U	0.25	50.0	49.1	98	80 - 120
7440-50-8	Copper	0.25U	0.25	50.0	48.7	97	80 - 120
7439-89-6	Iron	25.0U	25.0	5000	4760	95	80 - 120
7439-92-1	Lead	0.25U	0.25	50.0	45.9	92	80 - 120
7439-95-4	Magnesium	25.0U	25.0	5000	4730	95	80 - 120
7439-96-5	Manganese	3.69J	1.25	50.0	47.6	95	80 - 120
7439-98-7	Molybdenum	0.25U	0.25	50.0	46.6	93	80 - 120
7440-02-0	Nickel	0.50U	0.50	100	98.6	99	80 - 120
7440-09-7	Potassium	25.0U	25.0	5000	4780	96	80 - 120
7782-49-2	Selenium	0.36J	0.25	10.0	8.53	85	80 - 120
7440-22-4	Silver	0.25U	0.25	50.0	47.1	94	80 - 120

Inorganics Quality Control Summary

Analytical Batch	531901	**Client ID**	MB531448	LCS531448
Prep Batch	531448	**GCAL ID**	1311366	1311367
Prep Method	EPA 3010A	**Sample Type**	Method Blank	LCS
		Prep Date	05/01/2014 13:00	05/01/2014 13:00
		Analytical Date	05/08/2014 11:08	05/08/2014 11:17
		Matrix	Water	Water

EPA 6020A		**Units**	ug/L	**Spike**	**Result**		**Control**
		Result	**RDL**	**Added**		**% R**	**Limits % R**
7440-23-5	Sodium	25.0U	25.0	5000	4590	92	80 - 120
7440-28-0	Thallium	0.25U	0.25	50.0	45.0	90	80 - 120
7440-32-6	Titanium	0.25U	0.25	50.0	45.8	92	80 - 120
7440-62-2	Vanadium	0.25U	0.25	50.0	48.8	98	80 - 120
7440-66-6	Zinc	5.00U	5.00	1000	922	92	80 - 120

Analytical Batch	531901	**Client ID**	MWQ-2		MWQ-2-ms			MWQ-2-sd			
Prep Batch	531448	**GCAL ID**	21404300906		21404300907			21404300908			
Prep Method	EPA 3010A	**Sample Type**	SAMPLE		MS			MSD			
		Prep Date	05/01/2014 13:00		05/01/2014 13:00			05/01/2014 13:00			
		Analytical Date	05/08/2014 06:28		05/08/2014 06:38			05/08/2014 06:47			
		Matrix	Water		Water			Water			

SW-846 6020A		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
7429-90-5	Aluminum	16.9	50.0	1000	1090	107	80 - 120	1010	99	7	20
7440-36-0	Antimony	0.54	5.00	100	115	114	80 - 120	112	111	2	20
7440-38-2	Arsenic	0.83	2.50	50.0	51.3	101	80 - 120	49.5	97	4	20
7440-39-3	Barium	27.4	2.50	50.0	81.3	108	80 - 120	80.3	106	1	20
7440-41-7	Beryllium	0.0	2.50	50.0	46.0	92	80 - 120	48.7	97	6	20
7440-43-9	Cadmium	0.0	2.50	50.0	50.6	101	80 - 120	49.1	98	3	20
7440-70-2	Calcium	238000	1250	25000	263000	100	80 - 120	261000	92	1	20
7440-47-3	Chromium	0.0	2.50	50.0	49.1	98	80 - 120	47.2	94	4	20
7440-48-4	Cobalt	0.0	2.50	50.0	48.7	97	80 - 120	46.7	93	4	20
7440-50-8	Copper	0.86	2.50	50.0	48.7	96	80 - 120	45.8	90	6	20
7439-89-6	Iron	131	250	5000	4930	96	80 - 120	4700	91	5	20
7439-92-1	Lead	0.42	2.50	50.0	49.3	98	80 - 120	47.3	94	4	20
7439-96-5	Manganese	194	12.5	50.0	277	**166***	80 - 120	240	93	14	20
7439-98-7	Molybdenum	20.5	2.50	50.0	72.2	103	80 - 120	71.3	102	1	20
7440-02-0	Nickel	1.64	5.00	100	96.8	95	80 - 120	93.6	92	3	20
7440-09-7	Potassium	8560	250	5000	13800	104	80 - 120	13500	100	2	20
7782-49-2	Selenium	3.39	2.50	10.0	13.8	104	80 - 120	12.6	92	9	20

Inorganics Quality Control Summary

Analytical Batch	531901	**Client ID**	MWQ-2	MWQ-2-ms	MWQ-2-sd
Prep Batch	531448	**GCAL ID**	21404300906	21404300907	21404300908
Prep Method	EPA 3010A	**Sample Type**	SAMPLE	MS	MSD
		Prep Date	05/01/2014 13:00	05/01/2014 13:00	05/01/2014 13:00
		Analytical Date	05/08/2014 06:28	05/08/2014 06:38	05/08/2014 06:47
		Matrix	Water	Water	Water

SW-846 6020A		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
7440-22-4	Silver	0.0	2.50	50.0	34.8	**70***	80 - 120	35.3	**71***	1	20
7440-28-0	Thallium	0.0	2.50	50.0	44.1	88	80 - 120	43.4	87	1	20
7440-32-6	Titanium	0.0	2.50	50.0	51.2	102	80 - 120	47.3	95	8	20
7440-62-2	Vanadium	0.47	2.50	50.0	51.9	103	80 - 120	50.5	100	3	20
7440-66-6	Zinc	442	50.0	1000	1380	94	80 - 120	1340	90	3	20

Analytical Batch	531901	**Client ID**	MWQ-2	MWQ-2-ms	MWQ-2-sd
Prep Batch	531448	**GCAL ID**	21404300906	21404300907	21404300908
Prep Method	EPA 3010A	**Sample Type**	SAMPLE	MS	MSD
		Prep Date	05/01/2014 13:00	05/01/2014 13:00	05/01/2014 13:00
		Analytical Date	05/08/2014 05:11	05/08/2014 05:21	05/08/2014 05:30
		Matrix	Water	Water	Water

SW-846 6020A		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
7439-95-4	Magnesium	132000	12500	5000	137000	94	80 - 120	137000	84	0	20
7440-23-5	Sodium	2190000	12500	5000	2170000	**-314***	80 - 120	2180000	**-138***	0	20

Analytical Batch	531901	**Client ID**	MWQ-19	1310815MS	1310815MSD
Prep Batch	531339	**GCAL ID**	21404300901	1310845	1310846
Prep Method	EPA 3010A	**Sample Type**	SAMPLE	MS	MSD
		Prep Date	04/30/2014 12:30	04/30/2014 12:30	04/30/2014 12:30
		Analytical Date	05/08/2014 09:22	05/08/2014 09:31	05/08/2014 09:41
		Matrix	Water	Water	Water

EPA 6020A		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
7429-90-5	Aluminum	44.4	25.0	1000	1180	113	80 - 120	1150	111	2	20
7440-36-0	Antimony	3.44	2.50	100	125	**122***	80 - 120	124	**121***	1	20
7440-38-2	Arsenic	0.61	1.25	50.0	53.9	107	80 - 120	53.1	105	2	20
7440-39-3	Barium	42.3	1.25	50.0	95.7	107	80 - 120	94.5	104	1	20
7440-41-7	Beryllium	0.0	1.25	50.0	51.5	103	80 - 120	49.4	99	4	20

Inorganics Quality Control Summary

Analytical Batch	531901	**Client ID**	MWQ-19	1310815MS	1310815MSD
Prep Batch	531339	**GCAL ID**	21404300901	1310845	1310846
Prep Method	EPA 3010A	**Sample Type**	SAMPLE	MS	MSD
		Prep Date	04/30/2014 12:30	04/30/2014 12:30	04/30/2014 12:30
		Analytical Date	05/08/2014 09:22	05/08/2014 09:31	05/08/2014 09:41
		Matrix	Water	Water	Water

EPA 6020A		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
7440-43-9	Cadmium	0.0	1.25	50.0	54.7	109	80 - 120	53.8	108	2	20
7440-47-3	Chromium	22.6	1.25	50.0	53.2	**61***	80 - 120	52.3	**59***	2	20
7440-48-4	Cobalt	0.66	1.25	50.0	51.7	102	80 - 120	51.0	101	1	20
7440-50-8	Copper	1.12	1.25	50.0	50.8	99	80 - 120	49.5	97	2	20
7439-89-6	Iron	1360	125	5000	6490	103	80 - 120	6330	99	3	20
7439-92-1	Lead	120	1.25	50.0	54.5	**-131***	80 - 120	53.2	**-133***	2	20
7439-96-5	Manganese	383	6.25	50.0	436	107	80 - 120	425	85	3	20
7439-98-7	Molybdenum	4.33	1.25	50.0	59.2	110	80 - 120	59.5	110	1	20
7440-02-0	Nickel	1.15	2.50	100	102	101	80 - 120	100	99	2	20
7440-09-7	Potassium	9450	125	5000	15100	113	80 - 120	15000	112	1	20
7782-49-2	Selenium	2.13	1.25	10.0	12.5	104	80 - 120	12.4	103	1	20
7440-22-4	Silver	0.0	1.25	50.0	50.1	100	80 - 120	49.0	98	2	20
7440-28-0	Thallium	0.0	1.25	50.0	47.6	95	80 - 120	47.1	94	1	20
7440-32-6	Titanium	1.35	1.25	50.0	55.6	109	80 - 120	56.2	110	1	20
7440-62-2	Vanadium	1.10	1.25	50.0	56.4	111	80 - 120	55.4	108	2	20
7440-66-6	Zinc	84.4	25.0	1000	1070	99	80 - 120	1040	96	2	20

Analytical Batch	532028	**Client ID**	MB531670	LCS531670
Prep Batch	531670	**GCAL ID**	1312362	1312363
Prep Method	EPA 3010A	**Sample Type**	Method Blank	LCS
		Prep Date	05/05/2014 11:40	05/05/2014 11:40
		Analytical Date	05/09/2014 00:28	05/09/2014 00:38
		Matrix	Water	Water

EPA 6020A		**Units**	ug/L	**Spike**	**Result**		**Control**
		Result	**RDL**	**Added**		**% R**	**Limits % R**
7429-90-5	Aluminum	5.00U	5.00	1000	1080	108	80 - 120
7440-36-0	Antimony	0.50U	0.50	100	107	107	80 - 120
7440-38-2	Arsenic	0.25U	0.25	50.0	50.4	101	80 - 120
7440-39-3	Barium	0.25U	0.25	50.0	52.0	104	80 - 120
7440-41-7	Beryllium	0.25U	0.25	50.0	54.6	109	80 - 120
7440-43-9	Cadmium	0.25U	0.25	50.0	51.3	103	80 - 120

Inorganics Quality Control Summary

Analytical Batch 532028	**Client ID**	MB531670		LCS531670
Prep Batch 531670	**GCAL ID**	1312362		1312363
Prep Method EPA 3010A	**Sample Type**	Method Blank		LCS
	Prep Date	05/05/2014 11:40		05/05/2014 11:40
	Analytical Date	05/09/2014 00:28		05/09/2014 00:38
	Matrix	Water		Water

EPA 6020A		**Units**	ug/L	**Spike**	**Result**		**Control**
		Result	**RDL**	**Added**		**% R**	**Limits % R**
7440-70-2	Calcium	147J	125	25000	26000	104	80 - 120
7440-47-3	Chromium	0.25U	0.25	50.0	53.9	108	80 - 120
7440-48-4	Cobalt	0.25U	0.25	50.0	54.4	109	80 - 120
7440-50-8	Copper	0.25U	0.25	50.0	53.2	106	80 - 120
7439-89-6	Iron	25.0U	25.0	5000	5160	103	80 - 120
7439-92-1	Lead	0.25U	0.25	50.0	52.0	104	80 - 120
7439-95-4	Magnesium	25.0U	25.0	5000	5490	110	80 - 120
7439-96-5	Manganese	1.85J	1.25	50.0	52.5	105	80 - 120
7439-98-7	Molybdenum	0.25U	0.25	50.0	52.1	104	80 - 120
7440-02-0	Nickel	0.50U	0.50	100	109	109	80 - 120
7440-09-7	Potassium	25.0U	25.0	5000	5430	109	80 - 120
7782-49-2	Selenium	0.25U	0.25	10.0	9.47	95	80 - 120
7440-22-4	Silver	0.25U	0.25	50.0	52.1	104	80 - 120
7440-23-5	Sodium	25.0U	25.0	5000	5420	108	80 - 120
7440-28-0	Thallium	0.25U	0.25	50.0	48.7	97	80 - 120
7440-32-6	Titanium	0.25U	0.25	50.0	51.1	102	80 - 120
7440-62-2	Vanadium	0.25U	0.25	50.0	53.5	107	80 - 120
7440-66-6	Zinc	5.00U	5.00	1000	967	97	80 - 120

Analytical Batch 532028	**Client ID**	UNICRACKER-SP-02 (SPLP)	1311848MS	1311848MSD
Prep Batch 531670	**GCAL ID**	21405021102	1312404	1312405
Prep Method EPA 3010A	**Sample Type**	SAMPLE	MS	MSD
	Prep Date	05/05/2014 11:40	05/05/2014 11:40	05/05/2014 11:40
	Analytical Date	05/09/2014 08:03	05/09/2014 08:12	05/09/2014 08:22
	Matrix	Solid	Solid	Solid

EPA 6020A		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
7429-90-5	Aluminum	10100	5.00	1000	13500	**339***	80 - 120	14400	**437***	7	20
7440-36-0	Antimony	0.0	0.50	100	84.1	84	80 - 120	90.7	91	8	20
7440-38-2	Arsenic	2.64	0.25	50.0	47.2	89	80 - 120	50.0	95	6	20
7440-39-3	Barium	64.6	0.25	50.0	117	105	80 - 120	127	**124***	8	20

Inorganics Quality Control Summary

Analytical Batch 532028	**Client ID**	UNICRACKER-SP-02 (SPLP)	1311848MS	1311848MSD	
Prep Batch 531670	**GCAL ID**	21405021102	1312404	1312405	
Prep Method EPA 3010A	**Sample Type**	SAMPLE	MS	MSD	
	Prep Date	05/05/2014 11:40	05/05/2014 11:40	05/05/2014 11:40	
	Analytical Date	05/09/2014 08:03	05/09/2014 08:12	05/09/2014 08:22	
	Matrix	Solid	Solid	Solid	

EPA 6020A		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
7440-41-7	Beryllium	0.27	0.25	50.0	47.1	94	80 - 120	48.8	97	4	20
7440-43-9	Cadmium	0.0	0.25	50.0	47.6	95	80 - 120	51.2	102	7	20
7440-70-2	Calcium	3210	125	25000	26400	93	80 - 120	28000	99	6	20
7440-47-3	Chromium	10.3	0.25	50.0	59.6	99	80 - 120	63.4	106	6	20
7440-48-4	Cobalt	1.74	0.25	50.0	50.1	97	80 - 120	53.4	103	6	20
7440-50-8	Copper	8.02	0.25	50.0	55.6	95	80 - 120	59.0	102	6	20
7439-89-6	Iron	9120	25.0	5000	14600	110	80 - 120	15600	**130***	7	20
7439-92-1	Lead	3.19	0.25	50.0	51.3	96	80 - 120	55.2	104	7	20
7439-95-4	Magnesium	2110	25.0	5000	7010	98	80 - 120	7420	106	6	20
7439-96-5	Manganese	84.1	1.25	50.0	131	95	80 - 120	140	111	6	20
7439-98-7	Molybdenum	1.01	0.25	50.0	47.8	94	80 - 120	51.9	102	8	20
7440-02-0	Nickel	8.09	0.50	100	105	97	80 - 120	111	103	6	20
7440-09-7	Potassium	832	25.0	5000	5690	97	80 - 120	6030	104	6	20
7782-49-2	Selenium	0.0	0.25	10.0	7.97	80	80 - 120	8.44	84	6	20
7440-22-4	Silver	0.0	0.25	50.0	47.2	94	80 - 120	51.2	102	8	20
7440-23-5	Sodium	12700	25.0	5000	17200	91	80 - 120	18200	111	5	20
7440-28-0	Thallium	0.0	0.25	50.0	45.0	90	80 - 120	47.9	96	6	20
7440-32-6	Titanium	151	0.25	50.0	211	120	80 - 120	232	**162***	9	20
7440-62-2	Vanadium	17.6	0.25	50.0	68.3	101	80 - 120	72.9	111	6	20
7440-66-6	Zinc	25.4	5.00	1000	901	88	80 - 120	956	93	6	20

Inorganics Quality Control Summary

Analytical Batch	531465	**Client ID**	MB531258			LCS531258		
Prep Batch	531258	**GCAL ID**	1310629			1310630		
Prep Method	EPA 7470A	**Sample Type**	Method Blank			LCS		
		Prep Date	04/30/2014 10:55			04/30/2014 10:55		
		Analytical Date	05/01/2014 16:07			05/01/2014 16:08		
		Matrix	Water			Water		
EPA 7470A		**Units**	ug/L	**Spike**	**Result**		**Control**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**	
7439-97-6	Mercury	0.070U	0.070	5.00	4.84	97	80 - 120	

Analytical Batch	531465	**Client ID**	SB-1			1310598MS			1310598MSD			
Prep Batch	531258	**GCAL ID**	21404294701			1310631			1310632			
Prep Method	EPA 7470A	**Sample Type**	SAMPLE			MS			MSD			
		Prep Date	04/30/2014 10:55			04/30/2014 10:55			04/30/2014 10:55			
		Analytical Date	05/01/2014 16:10			05/01/2014 16:12			05/01/2014 16:14			
		Matrix	Water			Water			Water			
EPA 7470A		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**		**RPD**		
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**	
7439-97-6	Mercury	0.00000	0.070	5.00	4.72	94	80 - 120	4.86	97	3	30	

Analytical Batch	531620	**Client ID**	MB531447			LCS531447		
Prep Batch	531447	**GCAL ID**	1311363			1311364		
Prep Method	EPA 7470A	**Sample Type**	Method Blank			LCS		
		Prep Date	05/01/2014 13:00			05/01/2014 13:00		
		Analytical Date	05/03/2014 16:37			05/03/2014 16:39		
		Matrix	Water			Water		
EPA 7470A		**Units**	ug/L	**Spike**	**Result**		**Control**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**	
7439-97-6	Mercury	0.070U	0.070	5.00	5.03	101	80 - 120	

Inorganics Quality Control Summary

Analytical Batch	531620	**Client ID**	MWQ-2			MWQ-2-ms			MWQ-2-sd			
Prep Batch	531447	**GCAL ID**	21404300906			21404300907			21404300908			
Prep Method	EPA 7470A	**Sample Type**	SAMPLE			MS			MSD			
	Dissolved	**Prep Date**	05/01/2014 13:00			05/01/2014 13:00			05/01/2014 13:00			
		Analytical Date	05/03/2014 16:58			05/03/2014 17:00			05/03/2014 17:02			
		Matrix	Water			Water			Water			
EPA 7470A Dissolved		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**		**RPD**	**RPD**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**		**Limit**	
7439-97-6	Mercury	0.00000	0.070	5.00	2.84	57*	80 - 120	2.93	59*	3	20	

Analytical Batch	531788	**Client ID**	MB531688			LCS531688						
Prep Batch	531688	**GCAL ID**	1312448			1312449						
Prep Method	EPA 7470A	**Sample Type**	Method Blank			LCS						
		Prep Date	05/05/2014 12:15			05/05/2014 12:15						
		Analytical Date	05/06/2014 12:57			05/06/2014 12:59						
		Matrix	Water			Water						
EPA 7470A		**Units**	ug/L	**Spike**	**Result**		**Control**					
		Result	**RDL**	**Added**		**% R**	**Limits % R**					
7439-97-6	Mercury	0.070U	0.070	5.00	5.00	100	80 - 120					

Analytical Batch	531788	**Client ID**	CC3401-GW-46A			1311688MS			1311688MSD			
Prep Batch	531688	**GCAL ID**	21405014802			1312450			1312451			
Prep Method	EPA 7470A	**Sample Type**	SAMPLE			MS			MSD			
		Prep Date	05/05/2014 12:15			05/05/2014 12:15			05/05/2014 12:15			
		Analytical Date	05/06/2014 13:01			05/06/2014 13:02			05/06/2014 13:04			
		Matrix	Water			Water			Water			
EPA 7470A		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**		**RPD**	**RPD**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**		**Limit**	
7439-97-6	Mercury	0.00000	0.070	5.00	4.52	90	80 - 120	4.51	90	0	30	

Inorganics Quality Control Summary

Analytical Batch	531465	**Client ID**	MB531258			LCS531258		
Prep Batch	531258	**GCAL ID**	1310629			1310630		
Prep Method	EPA 7470A	**Sample Type**	Method Blank			LCS		
		Prep Date	04/30/2014 10:55			04/30/2014 10:55		
		Analytical Date	05/01/2014 16:07			05/01/2014 16:08		
		Matrix	Water			Water		
EPA 7470A		**Units**	ug/L	**Spike**	**Result**		**Control**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**	
7439-97-6	Mercury	0.070U	0.070	5.00	4.84	97	80 - 120	

Analytical Batch	531465	**Client ID**	SB-1		1310598MS			1310598MSD			
Prep Batch	531258	**GCAL ID**	21404294701		1310631			1310632			
Prep Method	EPA 7470A	**Sample Type**	SAMPLE		MS			MSD			
		Prep Date	04/30/2014 10:55		04/30/2014 10:55			04/30/2014 10:55			
		Analytical Date	05/01/2014 16:10		05/01/2014 16:12			05/01/2014 16:14			
		Matrix	Water		Water			Water			
EPA 7470A		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
7439-97-6	Mercury	0.00000	0.070	5.00	4.72	94	80 - 120	4.86	97	3	20

Analytical Batch	531620	**Client ID**	MB531447			LCS531447		
Prep Batch	531447	**GCAL ID**	1311363			1311364		
Prep Method	EPA 7470A	**Sample Type**	Method Blank			LCS		
		Prep Date	05/01/2014 13:00			05/01/2014 13:00		
		Analytical Date	05/03/2014 16:37			05/03/2014 16:39		
		Matrix	Water			Water		
EPA 7470A		**Units**	ug/L	**Spike**	**Result**		**Control**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**	
7439-97-6	Mercury	0.070U	0.070	5.00	5.03	101	80 - 120	

Inorganics Quality Control Summary

Analytical Batch	531620	**Client ID**	MWQ-2			MWQ-2-ms			MWQ-2-sd			
Prep Batch	531447	**GCAL ID**	21404300906			21404300907			21404300908			
Prep Method	EPA 7470A	**Sample Type**	SAMPLE			MS			MSD			
		Prep Date	05/01/2014 13:00			05/01/2014 13:00			05/01/2014 13:00			
		Analytical Date	05/03/2014 16:45			05/03/2014 16:47			05/03/2014 16:49			
		Matrix	Water			Water			Water			
EPA 7470A		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**	
7439-97-6	Mercury	0.00000	0.070	5.00	2.89	**58***	80 - 120	2.71	**54***	6	20	

Analytical Batch	531788	**Client ID**	MB531688		LCS531688		
Prep Batch	531688	**GCAL ID**	1312448		1312449		
Prep Method	EPA 7470A	**Sample Type**	Method Blank		LCS		
		Prep Date	05/05/2014 12:15		05/05/2014 12:15		
		Analytical Date	05/06/2014 12:57		05/06/2014 12:59		
		Matrix	Water		Water		
EPA 7470A		**Units**	ug/L	**Spike**	**Result**		**Control**
		Result	**RDL**	**Added**		**% R**	**Limits % R**
7439-97-6	Mercury	0.070U	0.070	5.00	5.00	100	80 - 120

Analytical Batch	531788	**Client ID**	CC3401-GW-46A			1311688MS			1311688MSD			
Prep Batch	531688	**GCAL ID**	21405014802			1312450			1312451			
Prep Method	EPA 7470A	**Sample Type**	SAMPLE			MS			MSD			
		Prep Date	05/05/2014 12:15			05/05/2014 12:15			05/05/2014 12:15			
		Analytical Date	05/06/2014 13:01			05/06/2014 13:02			05/06/2014 13:04			
		Matrix	Water			Water			Water			
EPA 7470A		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**	
7439-97-6	Mercury	0.00000	0.070	5.00	4.52	90	80 - 120	4.51	90	0	20	

Inorganics Quality Control Summary

Analytical Batch	531901	**Client ID**	MB531343	LCS531343
Prep Batch	531343	**GCAL ID**	1310858	1310859
Prep Method	EPA 3005A Dissolved	**Sample Type**	Method Blank	LCS
		Prep Date	04/30/2014 15:55	04/30/2014 15:55
		Analytical Date	05/08/2014 10:48	05/08/2014 10:58
		Matrix	Water	Water

EPA 6020A Dissolved		**Units**	ug/L	**Spike**	**Result**		**Control**
		Result	**RDL**	**Added**		**% R**	**Limits % R**
7429-90-5	Aluminum	5.00U	5.00	1000	1080	108	80 - 120
7440-36-0	Antimony	0.50U	0.50	100	117	117	80 - 120
7440-38-2	Arsenic	0.25U	0.25	50.0	54.8	110	80 - 120
7440-39-3	Barium	0.25U	0.25	50.0	56.0	112	80 - 120
7440-41-7	Beryllium	0.25U	0.25	50.0	51.1	102	80 - 120
7440-43-9	Cadmium	0.25U	0.25	50.0	54.6	109	80 - 120
7440-70-2	Calcium	125U	125	25000	26500	106	80 - 120
7440-47-3	Chromium	0.25U	0.25	50.0	52.3	105	80 - 120
7440-48-4	Cobalt	0.25U	0.25	50.0	52.9	106	80 - 120
7440-50-8	Copper	0.25U	0.25	50.0	52.5	105	80 - 120
7439-89-6	Iron	25.0U	25.0	5000	5200	104	80 - 120
7439-92-1	Lead	0.25U	0.25	50.0	50.4	101	80 - 120
7439-95-4	Magnesium	25.0U	25.0	5000	5310	106	80 - 120
7439-96-5	Manganese	1.25U	1.25	50.0	52.2	104	80 - 120
7439-98-7	Molybdenum	0.25U	0.25	50.0	52.3	105	80 - 120
7440-02-0	Nickel	0.50U	0.50	100	106	106	80 - 120
7440-09-7	Potassium	25.0U	25.0	5000	5390	108	80 - 120
7782-49-2	Selenium	0.25U	0.25	10.0	11.3	113	80 - 120
7440-22-4	Silver	0.25U	0.25	50.0	50.8	102	80 - 120
7440-23-5	Sodium	25.0U	25.0	5000	5150	103	80 - 120
7440-28-0	Thallium	0.25U	0.25	50.0	50.3	101	80 - 120
7440-32-6	Titanium	0.25U	0.25	50.0	52.0	104	80 - 120
7440-62-2	Vanadium	0.25U	0.25	50.0	53.4	107	80 - 120
7440-66-6	Zinc	5.00U	5.00	1000	1120	112	80 - 120

Inorganics Quality Control Summary

Analytical Batch	531901	**Client ID**	MB531449	LCS531449
Prep Batch	531449	**GCAL ID**	1311370	1311371
Prep Method	EPA 3005A Dissolved	**Sample Type**	Method Blank	LCS
		Prep Date	05/01/2014 14:35	05/01/2014 14:35
		Analytical Date	05/08/2014 07:26	05/08/2014 07:35
		Matrix	Water	Water

EPA 6020A Dissolved		**Units**	ug/L	**Spike**	**Result**		**Control**
		Result	**RDL**	**Added**		**% R**	**Limits % R**
7429-90-5	Aluminum	5.00U	5.00	1000	983	98	80 - 120
7440-36-0	Antimony	0.50U	0.50	100	107	107	80 - 120
7440-38-2	Arsenic	0.25U	0.25	50.0	49.5	99	80 - 120
7440-39-3	Barium	0.25U	0.25	50.0	51.2	102	80 - 120
7440-41-7	Beryllium	0.25U	0.25	50.0	46.5	93	80 - 120
7440-43-9	Cadmium	0.25U	0.25	50.0	48.8	98	80 - 120
7440-70-2	Calcium	125U	125	25000	24200	97	80 - 120
7440-47-3	Chromium	0.25U	0.25	50.0	48.0	96	80 - 120
7440-48-4	Cobalt	0.25U	0.25	50.0	48.0	96	80 - 120
7440-50-8	Copper	0.25U	0.25	50.0	47.8	96	80 - 120
7439-89-6	Iron	25.0U	25.0	5000	4700	94	80 - 120
7439-92-1	Lead	0.25U	0.25	50.0	48.0	96	80 - 120
7439-95-4	Magnesium	25.0U	25.0	5000	4840	97	80 - 120
7439-96-5	Manganese	1.25U	1.25	50.0	47.3	95	80 - 120
7439-98-7	Molybdenum	0.25U	0.25	50.0	47.7	95	80 - 120
7440-02-0	Nickel	0.50U	0.50	100	96.3	96	80 - 120
7440-09-7	Potassium	25.0U	25.0	5000	4940	99	80 - 120
7782-49-2	Selenium	0.25U	0.25	10.0	10.3	103	80 - 120
7440-22-4	Silver	0.25U	0.25	50.0	45.8	92	80 - 120
7440-23-5	Sodium	25.0U	25.0	5000	4690	94	80 - 120
7440-28-0	Thallium	0.25U	0.25	50.0	45.3	91	80 - 120
7440-32-6	Titanium	0.25U	0.25	50.0	47.3	95	80 - 120
7440-62-2	Vanadium	0.25U	0.25	50.0	48.3	97	80 - 120
7440-66-6	Zinc	5.00U	5.00	1000	978	98	80 - 120

Inorganics Quality Control Summary

Analytical Batch	531901	**Client ID**	MWQ-2	MWQ-2-ms	MWQ-2-sd
Prep Batch	531449	**GCAL ID**	21404300906	21404300907	21404300908
Prep Method	EPA 3005A	**Sample Type**	SAMPLE	MS	MSD
	Dissolved	**Prep Date**	05/01/2014 14:35	05/01/2014 14:35	05/01/2014 14:35
		Analytical Date	05/08/2014 12:54	05/08/2014 13:03	05/08/2014 13:13
		Matrix	Water	Water	Water

SW-846 6020A Dissolved		**Units**	ug/L								
		Result	**RDL**	**Spike Added**	**Result**	**% R**	**Control Limits % R**	**Result**	**% R**	**RPD**	**RPD Limit**
7429-90-5	Aluminum	17.1	50.0	1000	1010	99	80 - 120	1040	102	3	20
7440-36-0	Antimony	0.56	5.00	100	115	114	80 - 120	111	110	4	20
7440-38-2	Arsenic	0.84	2.50	50.0	50.7	100	80 - 120	48.2	95	5	20
7440-39-3	Barium	27.4	2.50	50.0	81.8	109	80 - 120	78.7	103	4	20
7440-41-7	Beryllium	0.0	2.50	50.0	45.2	90	80 - 120	44.3	89	2	20
7440-43-9	Cadmium	0.0	2.50	50.0	50.5	101	80 - 120	48.8	98	3	20
7440-70-2	Calcium	236000	1250	25000	259000	95	80 - 120	258000	89	1	20
7440-47-3	Chromium	0.0	2.50	50.0	47.9	96	80 - 120	46.7	93	3	20
7440-48-4	Cobalt	0.0	2.50	50.0	47.4	95	80 - 120	45.9	92	3	20
7440-50-8	Copper	0.45	2.50	50.0	47.0	93	80 - 120	45.2	90	4	20
7439-89-6	Iron	128	250	5000	4760	93	80 - 120	4660	91	2	20
7439-92-1	Lead	0.25	2.50	50.0	48.4	96	80 - 120	46.9	93	3	20
7439-96-5	Manganese	194	12.5	50.0	238	88	80 - 120	238	87	0	20
7439-98-7	Molybdenum	19.5	2.50	50.0	71.1	103	80 - 120	70.5	102	1	20
7440-02-0	Nickel	1.44	5.00	100	94.1	93	80 - 120	91.4	90	3	20
7440-09-7	Potassium	8520	250	5000	13700	103	80 - 120	13500	101	1	20
7782-49-2	Selenium	4.22	2.50	10.0	13.9	97	80 - 120	13.7	95	1	20
7440-22-4	Silver	0.0	2.50	50.0	29.0	**58***	80 - 120	28.6	**57***	1	20
7440-28-0	Thallium	0.0	2.50	50.0	43.5	87	80 - 120	42.8	86	2	20
7440-32-6	Titanium	0.0	2.50	50.0	50.0	100	80 - 120	46.3	93	8	20
7440-62-2	Vanadium	0.27	2.50	50.0	50.8	101	80 - 120	49.3	98	3	20
7440-66-6	Zinc	440	50.0	1000	1350	91	80 - 120	1350	91	0	20

Inorganics Quality Control Summary

Analytical Batch	531901	**Client ID**	MWQ-2	MWQ-2-ms	MWQ-2-sd
Prep Batch	531449	**GCAL ID**	21404300906	21404300907	21404300908
Prep Method	EPA 3005A	**Sample Type**	SAMPLE	MS	MSD
	Dissolved	**Prep Date**	05/01/2014 14:35	05/01/2014 14:35	05/01/2014 14:35
		Analytical Date	05/08/2014 11:27	05/08/2014 11:36	05/08/2014 11:46
		Matrix	Water	Water	Water

SW-846 6020A Dissolved		**Units**	ug/L								
		Result	**RDL**	**Spike Added**	**Result**	**% R**	**Control Limits % R**	**Result**	**% R**	**RPD**	**RPD Limit**
7439-95-4	Magnesium	134000	12500	5000	134000	**-5***	80 - 120	135000	**20***	1	20
7440-23-5	Sodium	2200000	12500	5000	2130000	**-1350***	80 - 120	2150000	**-899***	1	20

Analytical Batch	531901	**Client ID**	MWQ-19	1310815MS	1310815MSD
Prep Batch	531343	**GCAL ID**	21404300901	1311096	1311097
Prep Method	EPA 3005A	**Sample Type**	SAMPLE	MS	MSD
	Dissolved	**Prep Date**	04/30/2014 15:55	04/30/2014 15:55	04/30/2014 15:55
		Analytical Date	05/08/2014 02:37	05/08/2014 02:46	05/08/2014 02:56
		Matrix	Water	Water	Water

EPA 6020A Dissolved		**Units**	ug/L								
		Result	**RDL**	**Spike Added**	**Result**	**% R**	**Control Limits % R**	**Result**	**% R**	**RPD**	**RPD Limit**
7429-90-5	Aluminum	5.32	25.0	1000	1100	110	80 - 120	1060	106	4	20
7440-36-0	Antimony	0.0	2.50	100	120	120	80 - 120	115	115	4	20
7440-38-2	Arsenic	0.40	1.25	50.0	53.2	106	80 - 120	51.6	102	3	20
7440-39-3	Barium	32.9	1.25	50.0	89.0	112	80 - 120	88.2	111	1	20
7440-41-7	Beryllium	0.0	1.25	50.0	51.4	103	80 - 120	51.3	103	0	20
7440-43-9	Cadmium	0.0	1.25	50.0	53.7	107	80 - 120	52.1	104	3	20
7440-47-3	Chromium	0.29	1.25	50.0	52.1	104	80 - 120	50.6	101	3	20
7440-48-4	Cobalt	0.0	1.25	50.0	51.2	102	80 - 120	49.4	99	4	20
7440-50-8	Copper	0.0	1.25	50.0	49.6	99	80 - 120	48.4	97	2	20
7439-89-6	Iron	1240	125	5000	6220	100	80 - 120	6080	97	2	20
7439-92-1	Lead	0.0	1.25	50.0	52.0	104	80 - 120	50.7	101	3	20
7439-96-5	Manganese	364	6.25	50.0	407	87	80 - 120	407	87	0	20
7439-98-7	Molybdenum	1.30	1.25	50.0	58.3	114	80 - 120	56.2	110	4	20
7440-02-0	Nickel	0.81	2.50	100	101	100	80 - 120	97.8	97	3	20
7440-09-7	Potassium	8960	125	5000	14400	110	80 - 120	14300	106	1	20
7782-49-2	Selenium	1.62	1.25	10.0	10.9	93	80 - 120	10.6	90	3	20
7440-22-4	Silver	0.0	1.25	50.0	25.8	**52***	80 - 120	24.4	**49***	5	20
7440-28-0	Thallium	0.0	1.25	50.0	47.0	94	80 - 120	46.2	92	2	20
7440-32-6	Titanium	0.83	1.25	50.0	54.6	108	80 - 120	51.5	101	6	20
7440-62-2	Vanadium	0.65	1.25	50.0	54.7	108	80 - 120	52.8	104	4	20

Inorganics Quality Control Summary

Analytical Batch	531901	**Client ID**	MWQ-19	1310815MS	1310815MSD
Prep Batch	531343	**GCAL ID**	21404300901	1311096	1311097
Prep Method	EPA 3005A	**Sample Type**	SAMPLE	MS	MSD
	Dissolved	**Prep Date**	04/30/2014 15:55	04/30/2014 15:55	04/30/2014 15:55
		Analytical Date	05/08/2014 02:37	05/08/2014 02:46	05/08/2014 02:56
		Matrix	Water	Water	Water

EPA 6020A Dissolved		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
7440-66-6	Zinc	17.9	25.0	1000	1000	99	80 - 120	963	94	4	20

Analytical Batch	531901	**Client ID**	MWQ-19	1310815MS	1310815MSD
Prep Batch	531343	**GCAL ID**	21404300901	1311096	1311097
Prep Method	EPA 3005A	**Sample Type**	SAMPLE	MS	MSD
	Dissolved	**Prep Date**	04/30/2014 15:55	04/30/2014 15:55	04/30/2014 15:55
		Analytical Date	05/08/2014 00:22	05/08/2014 00:32	05/08/2014 00:41
		Matrix	Water	Water	Water

EPA 6020A Dissolved		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
7440-70-2	Calcium	351000	31300	25000	363000	**48***	80 - 120	370000	**75***	2	20
7439-95-4	Magnesium	186000	6250	5000	192000	108	80 - 120	192000	112	0	20
7440-23-5	Sodium	1070000	6250	5000	1080000	**125***	80 - 120	1080000	**170***	0	20

Analytical Batch	532028	**Client ID**	MB531722	LCS531722
Prep Batch	531722	**GCAL ID**	1312558	1312559
Prep Method	EPA 3005A	**Sample Type**	Method Blank	LCS
	Dissolved	**Prep Date**	05/06/2014 15:10	05/06/2014 15:10
		Analytical Date	05/08/2014 21:55	05/08/2014 22:05
		Matrix	Water	Water

EPA 6020A Dissolved		**Units**	ug/L	**Spike**	**Result**		**Control**
		Result	**RDL**	**Added**		**% R**	**Limits % R**
7429-90-5	Aluminum	5.00U	5.00	1000	1000	100	80 - 120
7440-36-0	Antimony	0.50U	0.50	100	101	101	80 - 120
7440-38-2	Arsenic	0.25U	0.25	50.0	49.0	98	80 - 120
7440-39-3	Barium	0.25U	0.25	50.0	48.0	96	80 - 120
7440-41-7	Beryllium	0.25U	0.25	50.0	49.3	99	80 - 120
7440-43-9	Cadmium	0.25U	0.25	50.0	48.7	97	80 - 120
7440-70-2	Calcium	125U	125	25000	23900	95	80 - 120
7440-47-3	Chromium	0.25U	0.25	50.0	48.5	97	80 - 120

Inorganics Quality Control Summary

Analytical Batch	532028	**Client ID**	MB531722	LCS531722	
Prep Batch	531722	**GCAL ID**	1312558	1312559	
Prep Method	EPA 3005A	**Sample Type**	Method Blank	LCS	
	Dissolved	**Prep Date**	05/06/2014 15:10	05/06/2014 15:10	
		Analytical Date	05/08/2014 21:55	05/08/2014 22:05	
		Matrix	Water	Water	

EPA 6020A Dissolved		**Units**	ug/L	**Spike**	**Result**		**Control**
		Result	**RDL**	**Added**		**% R**	**Limits % R**
7440-48-4	Cobalt	0.25U	0.25	50.0	49.2	98	80 - 120
7440-50-8	Copper	0.25U	0.25	50.0	48.1	96	80 - 120
7439-89-6	Iron	25.0U	25.0	5000	4680	94	80 - 120
7439-92-1	Lead	0.25U	0.25	50.0	47.7	95	80 - 120
7439-95-4	Magnesium	25.0U	25.0	5000	4980	100	80 - 120
7439-96-5	Manganese	1.25U	1.25	50.0	47.2	94	80 - 120
7439-98-7	Molybdenum	0.25U	0.25	50.0	47.8	96	80 - 120
7440-02-0	Nickel	0.50U	0.50	100	97.8	98	80 - 120
7440-09-7	Potassium	25.0U	25.0	5000	5010	100	80 - 120
7782-49-2	Selenium	0.25U	0.25	10.0	10.1	101	80 - 120
7440-22-4	Silver	0.25U	0.25	50.0	47.0	94	80 - 120
7440-23-5	Sodium	25.0U	25.0	5000	4910	98	80 - 120
7440-28-0	Thallium	0.25U	0.25	50.0	44.9	90	80 - 120
7440-32-6	Titanium	0.25U	0.25	50.0	46.7	93	80 - 120
7440-62-2	Vanadium	0.25U	0.25	50.0	48.9	98	80 - 120
7440-66-6	Zinc	5.00U	5.00	1000	956	96	80 - 120

Analytical Batch	532028	**Client ID**	MWQ-14	1311810MS	1311810MSD	
Prep Batch	531722	**GCAL ID**	21404300909	1312560	1312561	
Prep Method	EPA 3005A	**Sample Type**	SAMPLE	MS	MSD	
	Dissolved	**Prep Date**	05/06/2014 15:10	05/06/2014 15:10	05/06/2014 15:10	
		Analytical Date	05/08/2014 22:53	05/08/2014 23:02	05/08/2014 23:12	
		Matrix	Water	Water	Water	

EPA 6020A Dissolved		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
7429-90-5	Aluminum	17.4	25.0	1000	1020	100	80 - 120	1040	103	2	20
7440-36-0	Antimony	0.0	2.50	100	107	107	80 - 120	107	107	0	20
7440-38-2	Arsenic	1.41	1.25	50.0	50.7	98	80 - 120	51.1	99	1	20
7440-39-3	Barium	11.9	1.25	50.0	62.9	102	80 - 120	62.4	101	1	20
7440-41-7	Beryllium	0.0	1.25	50.0	49.0	98	80 - 120	50.9	102	4	20
7440-43-9	Cadmium	0.0	1.25	50.0	50.1	100	80 - 120	49.9	100	0	20

Inorganics Quality Control Summary

Analytical Batch	532028	**Client ID**	MWQ-14	1311810MS	1311810MSD
Prep Batch	531722	**GCAL ID**	21404300909	1312560	1312561
Prep Method	EPA 3005A	**Sample Type**	SAMPLE	MS	MSD
	Dissolved	**Prep Date**	05/06/2014 15:10	05/06/2014 15:10	05/06/2014 15:10
		Analytical Date	05/08/2014 22:53	05/08/2014 23:02	05/08/2014 23:12
		Matrix	Water	Water	Water

EPA 6020A Dissolved		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
7440-70-2	Calcium	78200	625	25000	102000	93	80 - 120	102000	93	0	20
7440-47-3	Chromium	0.65	1.25	50.0	49.2	97	80 - 120	49.7	98	1	20
7440-48-4	Cobalt	0.0	1.25	50.0	48.6	97	80 - 120	49.7	99	2	20
7440-50-8	Copper	0.52	1.25	50.0	48.0	95	80 - 120	48.0	95	0	20
7439-89-6	Iron	0.0	125	5000	4670	93	80 - 120	4650	93	0	20
7439-92-1	Lead	0.30	1.25	50.0	49.1	98	80 - 120	48.9	97	0	20
7439-96-5	Manganese	0.0	6.25	50.0	47.4	95	80 - 120	47.4	95	0	20
7439-98-7	Molybdenum	24.1	1.25	50.0	76.8	105	80 - 120	76.8	105	0	20
7440-02-0	Nickel	14.3	2.50	100	110	96	80 - 120	111	97	1	20
7440-09-7	Potassium	10800	125	5000	15900	102	80 - 120	15900	103	0	20
7782-49-2	Selenium	24.1	1.25	10.0	34.4	103	80 - 120	33.5	95	2	20
7440-22-4	Silver	0.0	1.25	50.0	40.6	81	80 - 120	41.8	84	3	20
7440-28-0	Thallium	0.0	1.25	50.0	43.1	86	80 - 120	43.8	88	2	20
7440-32-6	Titanium	0.0	1.25	50.0	49.8	100	80 - 120	48.4	97	3	20
7440-62-2	Vanadium	5.95	1.25	50.0	55.7	100	80 - 120	56.4	101	1	20
7440-66-6	Zinc	26.2	25.0	1000	947	92	80 - 120	950	92	0	20

Analytical Batch	532028	**Client ID**	MWQ-14	1311810MS	1311810MSD
Prep Batch	531722	**GCAL ID**	21404300909	1312560	1312561
Prep Method	EPA 3005A	**Sample Type**	SAMPLE	MS	MSD
	Dissolved	**Prep Date**	05/06/2014 15:10	05/06/2014 15:10	05/06/2014 15:10
		Analytical Date	05/08/2014 22:15	05/08/2014 22:24	05/08/2014 22:34
		Matrix	Water	Water	Water

EPA 6020A Dissolved		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
7439-95-4	Magnesium	65300	2500	5000	69300	81	80 - 120	70200	98	1	20
7440-23-5	Sodium	726000	2500	5000	719000	**-140***	80 - 120	729000	**63***	1	20

General Chemistry Quality Control Summary

Analytical Batch	531426	Client ID	MB531426			LCS531426		
Prep Batch	N/A	GCAL ID	1311291			1311292		
		Sample Type	Method Blank			LCS		
		Analytical Date	05/01/2014 15:49			05/01/2014 15:49		
		Matrix	Water			Water		
SM 2540 C-2011		**Units**	mg/L	**Spike**	**Result**		**Control**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**	
WET-035	Total Dissolved Solids(TDS)	4.39U	4.39	1000	840	84	80 - 120	

Analytical Batch	531426	Client ID	MWQ-2		1311325DUP		
Prep Batch	N/A	GCAL ID	21404300906		1311352		
		Sample Type	SAMPLE		DUP		
		Analytical Date	05/01/2014 15:49		05/01/2014 15:49		
		Matrix	Water		Water		
SM 2540 C-2011		**Units**	mg/L	**Result**		**RPD**	
		Result	**RDL**		**RPD**	**Limit**	
WET-035	Total Dissolved Solids(TDS)	6500	4.39	6720	3	5.4	

Analytical Batch	531699	Client ID	MB531699			LCS531699		
Prep Batch	N/A	GCAL ID	1312470			1312471		
		Sample Type	Method Blank			LCS		
		Analytical Date	05/05/2014 15:50			05/05/2014 15:50		
		Matrix	Water			Water		
SM 2540 C-2011		**Units**	mg/L	**Spike**	**Result**		**Control**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**	
WET-035	Total Dissolved Solids(TDS)	4.39U	4.39	1000	872	87	80 - 120	

Analytical Batch	531699	Client ID	U43010B		1311568DUP		
Prep Batch	N/A	GCAL ID	21405013401		1312472		
		Sample Type	SAMPLE		DUP		
		Analytical Date	05/05/2014 15:50		05/05/2014 15:50		
		Matrix	Water		Water		
SM 2540 C-2011		**Units**	mg/L	**Result**		**RPD**	
		Result	**RDL**		**RPD**	**Limit**	
WET-035	Total Dissolved Solids(TDS)	3780	4.39	3660	3	5.4	

General Chemistry Quality Control Summary

Analytical Batch	531299	Client ID	MB531299			LCS531299		
Prep Batch	N/A	GCAL ID	1310709			1310710		
		Sample Type	Method Blank			LCS		
		Analytical Date	04/30/2014 12:31			04/30/2014 12:32		
		Matrix	Water			Water		
EPA 353.2 Rev. 2		**Units**	mg/L-N					
		Result	**RDL**	**Spike Added**	**Result**	**% R**	**Control Limits % R**	
14797-65-0	Nitrite	0.006U	0.006	0.500	0.465	93	90 - 110	

Analytical Batch	531299	Client ID	PLANT EFF			1310572MS			1310572MSD			
Prep Batch	N/A	GCAL ID	21404293501			1310711			1310712			
		Sample Type	SAMPLE			MS			MSD			
		Analytical Date	04/30/2014 12:37			04/30/2014 12:39			04/30/2014 12:49			
		Matrix	Water			Water			Water			
EPA 353.2 Rev. 2		**Units**	mg/L-N									
		Result	**RDL**	**Spike Added**	**Result**	**% R**	**Control Limits % R**	**Result**	**% R**	**RPD**	**RPD Limit**	
14797-65-0	Nitrite	0.001	0.006	0.500	0.474	95	90 - 110	0.470	94	1	25	

Analytical Batch	531469	Client ID	MB531469			LCS531469		
Prep Batch	N/A	GCAL ID	1311543			1311544		
		Sample Type	Method Blank			LCS		
		Analytical Date	05/01/2014 16:09			05/01/2014 16:10		
		Matrix	Water			Water		
EPA 353.2 Rev. 2		**Units**	mg/L-N					
		Result	**RDL**	**Spike Added**	**Result**	**% R**	**Control Limits % R**	
14797-65-0	Nitrite	0.006U	0.006	0.500	0.517	103	90 - 110	

Analytical Batch	531469	Client ID	MWQ-2			MWQ-2-ms			MWQ-2-sd			
Prep Batch	N/A	GCAL ID	21404300906			21404300907			21404300908			
		Sample Type	SAMPLE			MS			MSD			
		Analytical Date	05/01/2014 16:14			05/01/2014 16:15			05/01/2014 16:17			
		Matrix	Water			Water			Water			
EPA 353.2 Nitrite		**Units**	mg/L-N									
		Result	**RDL**	**Spike Added**	**Result**	**% R**	**Control Limits % R**	**Result**	**% R**	**RPD**	**RPD Limit**	
14797-65-0	Nitrite	0.000	0.006	0.500	0.536	107	90 - 110	0.537	107	0	25	

General Chemistry Quality Control Summary

Analytical Batch 531568	**Client ID**	MB531568			LCS531568			
Prep Batch N/A	**GCAL ID**	1312039			1312040			
	Sample Type	Method Blank			LCS			
	Analytical Date	05/02/2014 17:52			05/02/2014 17:54			
	Matrix	Water			Water			
EPA 353.2 Rev. 2		**Units**	mg/L-N	**Spike**	**Result**		**Control**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**	
14797-65-0 Nitrite		0.006U	0.006	0.500	0.536	107	90 - 110	

Analytical Batch 531568	**Client ID**	MWQ-20			1311811MS			1311811MSD			
Prep Batch N/A	**GCAL ID**	21404300910			1312041			1312042			
	Sample Type	SAMPLE			MS			MSD			
	Analytical Date	05/02/2014 17:56			05/02/2014 17:57			05/02/2014 17:59			
	Matrix	Water			Water			Water			
EPA 353.2 Rev. 2		**Units**	mg/L-N	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
14797-65-0 Nitrite		0.022	0.006	0.500	0.527	101	90 - 110	0.534	102	1	25

General Chemistry Quality Control Summary

Analytical Batch	531300	Client ID	MB531300			LCS531300		
Prep Batch	N/A	GCAL ID	1310713			1310714		
		Sample Type	Method Blank			LCS		
		Analytical Date	04/30/2014 11:55			04/30/2014 11:56		
		Matrix	Water			Water		
EPA 353.2 Rev. 2		Units	mg/L-N	Spike	Result		Control
		Result	RDL	Added		% R	Limits % R
14797-55-8	Nitrate	0.008U	0.008	0.500	0.455	91	89.5 -110.5

Analytical Batch	531300	Client ID	PLANT EFF			1310572MS			1310572MSD			
Prep Batch	N/A	GCAL ID	21404293501			1310715			1310716			
		Sample Type	SAMPLE			MS			MSD			
		Analytical Date	04/30/2014 18:04			04/30/2014 18:05			04/30/2014 18:08			
		Matrix	Water			Water			Water			
EPA 353.2 Rev. 2		Units	mg/L-N	Spike	Result		Control	Result		RPD	RPD
		Result	RDL	Added		% R	Limits % R		% R	RPD	Limit
14797-55-8	Nitrate	36.8	1.64	100	129	93	89.5 -110.5	128	91	1	25

Analytical Batch	531468	Client ID	MB531468			LCS531468		
Prep Batch	N/A	GCAL ID	1311541			1311542		
		Sample Type	Method Blank			LCS		
		Analytical Date	05/01/2014 15:52			05/01/2014 15:53		
		Matrix	Water			Water		
EPA 353.2 Rev. 2		Units	mg/L-N	Spike	Result		Control
		Result	RDL	Added		% R	Limits % R
14797-55-8	Nitrate	0.008U	0.008	0.500	0.484	97	89.5 -110.5

Analytical Batch	531468	Client ID	MWQ-2			MWQ-2-ms			MWQ-2-sd			
Prep Batch	N/A	GCAL ID	21404300906			21404300907			21404300908			
		Sample Type	SAMPLE			MS			MSD			
		Analytical Date	05/01/2014 15:58			05/01/2014 15:59			05/01/2014 16:00			
		Matrix	Water			Water			Water			
EPA 353.2 Nitrate		Units	mg/L-N	Spike	Result		Control	Result		RPD	RPD
		Result	RDL	Added		% R	Limits % R		% R	RPD	Limit
14797-55-8	Nitrate	0.157	0.008	0.500	0.660	101	89.5 -110.5	0.655	100	1	25

General Chemistry Quality Control Summary

Analytical Batch	531567	Client ID	MB531567	LCS531567
Prep Batch	N/A	GCAL ID	1312035	1312036
		Sample Type	Method Blank	LCS
		Analytical Date	05/02/2014 17:29	05/02/2014 17:30
		Matrix	Water	Water

EPA 353.2 Rev. 2		Units	mg/L-N	Spike			
		Result	RDL	Added	Result	% R	Control Limits % R
14797-55-8	Nitrate	0.008U	0.008	0.500	0.510	102	89.5 -110.5

Analytical Batch	531567	Client ID	MWQ-20	1311811MS	1311811MSD
Prep Batch	N/A	GCAL ID	21404300910	1312037	1312038
		Sample Type	SAMPLE	MS	MSD
		Analytical Date	05/02/2014 17:35	05/02/2014 17:36	05/02/2014 17:37
		Matrix	Water	Water	Water

EPA 353.2 Rev. 2		Units	mg/L-N	Spike							
		Result	RDL	Added	Result	% R	Control Limits % R	Result	% R	RPD	RPD Limit
14797-55-8	Nitrate	0.030	0.008	0.500	0.460	86*	89.5 -110.5	0.456	85*	1	25

General Chemistry Quality Control Summary

Analytical Batch 531586	**Client ID**	MB531586		LCS531586	
Prep Batch N/A	**GCAL ID**	1312154		1312155	
	Sample Type	Method Blank		LCS	
	Analytical Date	05/03/2014 09:00		05/03/2014 08:42	
	Matrix	Water		Water	

EPA 300.0		**Units**	mg/L	**Spike**	**Result**		**Control**
		Result	**RDL**	**Added**		**% R**	**Limits % R**
16887-00-6	Chloride	0.050U	0.050	2.50	2.51	100	79 - 109
14808-79-8	Sulfate	0.050U	0.050	2.50	2.46	98	82 - 110

Analytical Batch 531586	**Client ID**	MWQ-2			MWQ-2-ms			MWQ-2-sd			
Prep Batch N/A	**GCAL ID**	21404300906			21404300907			21404300908			
	Sample Type	SAMPLE			MS			MSD			
	Analytical Date	05/03/2014 20:09			05/03/2014 20:27			05/03/2014 20:44			
	Matrix	Water			Water			Water			

EPA 300.0 Inorganic Anions		**Units**	mg/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
16887-00-6	Chloride	3440	100	5000	8630	104	79 - 109	8740	106	1	15
14808-79-8	Sulfate	1430	100	5000	6520	102	82 - 110	6500	101	0	15

Analytical Batch 531636	**Client ID**	MB531636		LCS531636	
Prep Batch N/A	**GCAL ID**	1312272		1312273	
	Sample Type	Method Blank		LCS	
	Analytical Date	05/04/2014 13:45		05/04/2014 13:27	
	Matrix	Water		Water	

EPA 300.0		**Units**	mg/L	**Spike**	**Result**		**Control**
		Result	**RDL**	**Added**		**% R**	**Limits % R**
16887-00-6	Chloride	0.088J	0.050	2.50	2.59	104	79 - 109
14808-79-8	Sulfate	0.050U	0.050	2.50	2.64	105	82 - 110

General Chemistry Quality Control Summary

Analytical Batch 531636	**Client ID**	BRINE	1311287MS	1311287MSD	
Prep Batch N/A	**GCAL ID**	21405010318	1312276	1312277	
	Sample Type	SAMPLE	MS	MSD	
	Analytical Date	05/04/2014 21:05	05/04/2014 21:22	05/04/2014 21:40	
	Matrix	Water	Water	Water	

EPA 300.0		**Units**	mg/L	**Spike**							
		Result	**RDL**	**Added**	**Result**	**% R**	**Control Limits % R**	**Result**	**% R**	**RPD**	**RPD Limit**
16887-00-6	Chloride	215000	5000	250000	468000	101	79 - 109	468000	101	0	15

General Chemistry Quality Control Summary

Analytical Batch 531554	**Client ID**	LCS531554	
Prep Batch N/A	**GCAL ID**	1311956	
	Sample Type	LCS	
	Analytical Date	05/02/2014 13:28	
	Matrix	Water	

SM 2320 B-2011	**Spike Added**	**Result**	**% R**	**Control Limits % R**
000000-00-5 Total Alkalinity	200	200	100	80 - 120

Analytical Batch 531554	**Client ID**	MWQ-19	1310815DUP
Prep Batch N/A	**GCAL ID**	21404300901	1311957
	Sample Type	SAMPLE	DUP
	Analytical Date	05/02/2014 13:28	05/02/2014 13:28
	Matrix	Water	Water

SM 2320 B-2011	**Units** mg/L CaCO3 **Result**	**RDL**	**Result**	**RPD**	**RPD Limit**
000000-00-5 Total Alkalinity	399	0.26	398	0	11

Analytical Batch 532045	**Client ID**	LCS532045	
Prep Batch N/A	**GCAL ID**	1314072	
	Sample Type	LCS	
	Analytical Date	05/08/2014 10:33	
	Matrix	Water	

SM 2320 B-2011	**Spike Added**	**Result**	**% R**	**Control Limits % R**
000000-00-5 Total Alkalinity	200	198	99	80 - 120

Analytical Batch 532045	**Client ID**	EASC-702, PD-01	1312535DUP
Prep Batch N/A	**GCAL ID**	21405052501	1314073
	Sample Type	SAMPLE	DUP
	Analytical Date	05/08/2014 10:33	05/08/2014 10:33
	Matrix	Water	Water

SM 2320 B-2011	**Units** mg/L CaCO3 **Result**	**RDL**	**Result**	**RPD**	**RPD Limit**
000000-00-5 Total Alkalinity	238	0.26	237	1	11

General Chemistry Quality Control Summary

Analytical Batch	531627	**Client ID**	MB531527			LCS531527		
Prep Batch	531527	**GCAL ID**	1311795			1311796		
Prep Method	Cyanide Prep	**Sample Type**	Method Blank			LCS		
		Prep Date	05/02/2014 12:20			05/02/2014 12:20		
		Analytical Date	05/04/2014 11:11			05/04/2014 11:12		
		Matrix	Water			Water		
EPA 9012B		**Units**	mg/L	**Spike**	**Result**		**Control**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**	
57-12-5	Cyanide	0.0011J	0.00050	0.020	0.020	100	80 - 120	

Analytical Batch	531627	**Client ID**	MB531527			LCSHI531527		
Prep Batch	531527	**GCAL ID**	1311795			1311797		
Prep Method	Cyanide Prep	**Sample Type**	Method Blank			LCSHI		
		Prep Date	05/02/2014 12:20			05/02/2014 12:20		
		Analytical Date	05/04/2014 11:11			05/04/2014 11:15		
		Matrix	Water			Water		
EPA 9012B		**Units**	mg/L	**Spike**	**Result**		**Control**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**	
57-12-5	Cyanide	0.0011J	0.00050	0.10	0.084	84	80 - 120	

Analytical Batch	531627	**Client ID**	MWQ-2			MWQ-2-ms			MWQ-2-sd			
Prep Batch	531527	**GCAL ID**	21404300906			21404300907			21404300908			
Prep Method	Cyanide Prep	**Sample Type**	SAMPLE			MS			MSD			
		Prep Date	05/02/2014 12:20			05/02/2014 12:20			05/02/2014 12:20			
		Analytical Date	05/04/2014 11:20			05/04/2014 11:21			05/04/2014 11:22			
		Matrix	Water			Water			Water			
SW-846 9012B Cyanide Water		**Units**	mg/L	**Spike**	**Result**		**Control**	**Result**		**RPD**	**RPD**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**		**Limit**	
57-12-5	Cyanide	0.0040	0.00050	0.10	0.084	80	80 - 120	0.086	82	2	20	

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Page 1 of 1

Project Number: A012-108

Chain of Custody Number (1): 14043901

Project Name / Site Name: Melrose 2014 Annual

Facility: Melrose Air Force Range

Client Name: USACE ABQ

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart (251)709-6509

Turn Around Time

24 Hour	☐
7 Day	☐
Standard	X
Other	☐

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	Sample Code (2)	Sample Number (3)	Sample Matrix (4)	Sample Method (5)	Number of Containers	Total and Dissolved Metals 6020A	Cyanide 9012A	Nitrate, Nitrite 300.0	Chloride, Sulfate 300.0	Perchlorate 6860	Alkalinity 2320B	TDS 2540C	Thallium Total and Dissolved 6020A	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID (Alphabetical Notation)
MWQ-19		29042014	0841		N	1	WG		5	X	X	X	X	X	X	X	X				A
MWQ-18		29042014	0931		N	1	WG		5	X	X	X	X	X	X	X	X				A
MWQ-21		29042014	1241		N	1	WG		5	X	X	X	X	X	X	X	X				A
				-																	
				-																	
				-																	
				-																	

Quality Assurance Samples (7)

Client ID: 4747 - TRINITY Analysis & Development Corp.

SDG: 214043009

Due Date: 05/07/14

Dissolved metals were field filtered.

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received by (Signed)	Date	Time
1.		4/29/14	1530	FedEx	4/29/14	1530
2.	FedEx	4/30/14	1000	C Brown	4/30/14	1000
3.						

Delivered Directly to Lab:	No
Method of Shipment:	Fedex
Analytical Lab:	GCAL
Lab Recipient:	
Shipped: No.:	1
Airbill Number:	
Delivery Location:	Baton Rouge, LA
Delivery Date/Time:	

1.) Chain of Custody Number = site name (e.g., SS-125) and then date (yymmdd) collected + custody number (e.g. **SS1251207201**)...July 20, 2012. (12 Characters Max; No Dashes)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-01 on 07/20/12 = 1, if sampled again on 07/20/12 = 2, etc.)

4.) Matrix Codes: **GS** = Soil Gas, **WG** = Ground Water , **WS** = Surface Water **SO** = Soil, **SE** = Sediment, **SL** = Sludge, **SS**= Suface Soil Samples, **WQ** = Aqueous Blank Samples (trip, equipment, ambient, etc.), **SQ**= Soil Blanks

5.) Sample Method Codes: **CS** = Compsite Sample, **E2** = Elec. Submersible Pump (1982 +), **G** = Grab, **H** = Hollow Stem Auger, **PP** = Peristaltic Pump, **W** = Swab or Wipe. (See handout for more methods)

6.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

NOTES: Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c. ERPIMS LOCID for TB, EB and AB are designated as FIELDQC samples.

8053-1076-7449

3.2 524

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Project Number: A012-108

Chain of Custody Number (1): 14043001

Project Name / Site Name: Melrose 2014 Annual

Facility: Melrose Air Force Range

Client Name: USACE ABQ

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart (251)709-6509

Turn Around Time

- 24 Hour ☐
- 7 Day ☐
- Standard X
- Other ☐

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	Sample Code (2)	Sample Number (3)	Sample Matrix (4)	Sample Method (5)	Number of Containers	Total and Dissolved Metals 6020A	Cyanide 9012A	Nitrate, Nitrite 300.0	Chloride, Sulfate 300.0	Perchlorate 6860	Alkalinity 2320B	TDS 2540C	Thallium Total and Dissolved 6020A	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID (Alphabetical Notation)
MWQ-22		30 04 2014	0841		N	1	WG		5	x	x	x	x	x	x	x	x				A
MWQ-22-a		30 04 2014	0841		FD	1	WG		5	x	x	x	x	x	x	x	x				A
MWQ-2		30 04 2014	1046		N	1	WG		5	x	x	x	x	x	x	x	x				B
MWQ-2-ms		30 04 2014	1046		MS	1	WG		5	x	x	x	x	x	x	x	x				B
MWQ-2-sd		30 04 2014	1046		SD	1	WG		5	x	x	x	x	x	x	x	x				B

Dissolved metals were field filtered.

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time
1.		4/30/14	1400
2.	FedEx 1000	5/1/14	
3.			

	Received by (Signed)	Date	Time
1.	FedEx 4730/14	1400	
2.	R Brown	5/1/14	1000
3.			

Delivered Directly to Lab: No
Method of Shipment: Fedex
Analytical Lab: GCAL
Lab Recipient:

Shipped: No.: 2
Airbill Number:
Delivery Location: Baton Rouge, LA
Delivery Date/Time:

1.) Chain of Custody Number = site name (e.g., SS-125) and then date (yymmdd) collected + custody number (e.g. **SS1251207201**)...July 20, 2012. (12 Characters Max; No Dashes)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-01 on 07/20/12 = 1, if sampled again on 07/20/12 = 2, etc.)
4.) Matrix Codes: **GS** = Soil Gas, **WG** = Ground Water , **WS** = Surface Water **SO** = Soil, **SE** = Sediment, **SL** = Sludge, **SS**= Suface Soil Samples, **WQ** = Aqueous Blank Samples (trip, equipment, ambient, etc.), **SQ**= Soil Blanks
5.) Sample Method Codes: **CS** = Composite Sample, **E2** = Elec. Submersible Pump (1982 +), **G** = Grab, **H** = Hollow Stem Auger, **PP** = Peristaltic Pump, **W** = Swab or Wipe. (See handout for more methods)
6.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

NOTES: Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c. ERPIMS LOCID for TB, EB and AB are designated as FIELDQC samples.

3.4 E24 4053-7 1078-7059

TRINITY ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Page 1 of 1

Project Number: A012-108

Chain of Custody Number (1): 14050103

Project Name / Site Name: Melrose 2014 Annual

Facility: Melrose Air Force Range

Client Name: USACE ABQ

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart (251)709-6509

Turn Around Time

24 Hour ☐
7 Day ☐
Standard X
Other ☐

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	Sample Code [2]	Sample Number [3]	Sample Matrix [4]	Sample Method [5]	Number of Containers	Total and Dissolved Metals 6020A	Cyanide 9012A	Nitrate, Nitrite 300.0	Chloride, Sulfate 300.0	Perchlorate 6860	Alkalinity 2320B	TDS 2540C	Thallium Total and Dissolved 6020A	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID (Alphabetical Notation)
MWQ-14		01052014	0751		N	1	WG		5	X	X	X	X	X	X	X	X				C
MWQ-20		01052014	1016		N	1	WG		5	X	X	X	X	X	X	X	X				C

Dissolved metals were field filtered. 2.6, 4.6 E22

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received by (Signed)	Date	Time
1.		5/1/14	1400	1. FEDEX		
2.	FEDEX	5-2-14	10:00	2.	5-2-14	10:00
3.				3.		

Delivered Directly to Lab: No
Method of Shipment: Fedex
Analytical Lab: QCAL
Lab Recipient:

Shipped: No.: 1
Airbill Number: 8055 3204 0084
Delivery Location: Baton Rouge, LA
Delivery Date/Time:

1.) Chain of Custody Number = site name (e.g., SS-125) and then date (yymmdd) collected + custody number (e.g. SS1251207201)...July 20, 2012. (12 Characters Max; No Dashes)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-01 on 07/20/12 = 1, if sampled again on 07/20/12 = 2, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Ground Water, WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS= Suface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ= Soil Blanks

5.) Sample Method Codes: CS = Composite Sample, E2 = Elec. Submersible Pump (1982 +), G = Grab, H = Hollow Stem Auger, PP = Peristaltic Pump, W = Swab or Wipe. (See handout for more methods)

6.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

NOTES: Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c. ERPIMS LOCID for TB, EB and AB are designated as FIELDQC samples.

GCAL ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIVING CHECKLIST

214043009

SAMPLE DELIVERY GROUP 214043009	
Client 4747 - TRINITY Analysis & Development Corp.	**Transport Method** FEDEX
Profile Number 195817	**Received By** Brown, Aaron D.
Line Item(s) 1 - Waters	**Receive Date(s)** 04/30/14

CHECKLIST	YES	NO	NA
Were all samples received using proper thermal preservation?	☑	☐	☐
When used, were all custody seals intact?	☑	☐	☐
Were all samples received in proper containers?	☑	☐	☐
Were all samples received using proper chemical preservation?	☑	☐	☐
Was preservative added to any container at the lab?	☐	☑	☐
Were all containers received in good condition?	☑	☐	☐
Were all VOA vials received with no head space?	☐	☐	☑
Do all sample labels match the Chain of Custody?	☑	☐	☐
Did the Chain of Custody list the sampling technician?	☑	☐	☐
Was the COC maintained i.e. all signatures, dates and time of receipt included?	☑	☐	☐

COOLERS

Airbill	Thermometer ID: E24	Temp(°C)
8053 1076 7449		3.2

DISCREPANCIES

None

LAB PRESERVATIONS

None

NOTES

May 08, 2014

Service Request No: R1403127

Mr. Sean Hardin
Gulf Coast Analytical Labs
7979 GSRI Avenue
Baton Rouge, LA 70820

Laboratory Results for: Melrose Air Force Range

Dear Mr. Hardin:

Enclosed are the results of the sample(s) submitted to our laboratory between April 30, 2014 and May 2, 2014. For your reference, these analyses have been assigned our service request number **R1403127**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7473. You may also contact me via email at Deb.Patton@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental

Deb Patton
Project Manager

ADDRESS 1565 Jefferson Rd, Building 300, Suite 360, Rochester, NY 14623 PHONE 585-288-5380 | FAX 585-288-8475
ALS GROUP USA, CORP. Part of the ALS Group An ALS Limited Company

Environmental www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

CASE NARRATIVE

This report contains analytical results for the following samples:
Service Request Number: R1403127

Lab ID	Client ID
R1403127-001	MWQ-19
R1403127-002	MWQ-18
R1403127-003	MWQ-21
R1403127-004	MWQ-22
R1403127-005	MWQ-22-a
R1403127-006	MWQ-2
R1403127-007	MWQ-14
R1403127-008	MWQ-20

All samples were received in good condition unless otherwise noted on the cooler receipt and preservation check form located at the end of this report.

All samples were preserved in accordance with approved analytical methods.

All samples have been analyzed by the approved methods cited on the analytical results pages.

All holding times and associated QC were within limits.

No analytical or QC problems were encountered.

All sampling activities performed by ALS personnel have been in accordance with "ALS Field Procedures and Measurements Manual" or by client specifications.

ALS Environmental

REPORT QUALIFIERS AND DEFINITIONS

U Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.

J Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).

B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.

E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.

E Organics- Concentration has exceeded the calibration range for that specific analysis.

D Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.

* Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.

H Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.

Spike was diluted out.

\+ Correlation coefficient for MSA is <0.995.

N Inorganics- Matrix spike recovery was outside laboratory limits.

N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.

S Concentration has been determined using Method of Standard Additions (MSA).

W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.

P Concentration >40% (25% for CLP) difference between the two GC columns.

C Confirmed by GC/MS

Q DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).

X See Case Narrative for discussion.

MRL Method Reporting Limit. Also known as:
LOQ Limit of Quantitation (LOQ)
The lowest concentration at which the method analyte may be reliably quantified under the method conditions.

MDL Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).

LOD Limit of Detection. A value at or above the MDL which has been verified to be detectable.

ND Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

ACCREDITED IN ACCORDANCE WITH nelac

Rochester Lab ID # for State Certifications[1]

NELAP Accredited	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Connecticut ID # PH0556	Nebraska Accredited	
Delaware Accredited	Nevada ID # NY-00032	North Carolina #676
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047		Virginia #460167

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Gulf Coast Analytical Labs
Project: Melrose Air Force Range
Sample Matrix: Water

Service Request: R1403127
Date Collected: 4/29/14 - 5/ 1/14
Date Received: 4/30/14 - 5/ 2/14

Analysis Method: 218.6 LL

Units: µg/L
Basis: NA

Chromium, Hexavalent, Dissolved

Sample Name	Lab Code	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
MWQ-19	R1403127-001	**0.126**		0.020	0.014	1	NA	5/5/14 16:16	
MWQ-18	R1403127-002	**0.652**		0.020	0.014	1	NA	5/5/14 16:25	
MWQ-21	R1403127-003	**0.479**		0.020	0.014	1	NA	5/5/14 16:33	
MWQ-22	R1403127-004	**0.028**		0.020	0.014	1	NA	5/5/14 17:06	
MWQ-22-a	R1403127-005	0.020	U	0.020	0.014	1	NA	5/5/14 17:14	
MWQ-2	R1403127-006	0.020	U	0.020	0.014	1	NA	5/5/14 17:23	
MWQ-14	R1403127-007	**0.509**		0.020	0.014	1	NA	5/5/14 17:48	
MWQ-20	R1403127-008	0.020	U	0.020	0.014	1	NA	5/5/14 17:56	
Method Blank	R1403127-MB	0.020	U	0.020	0.014	1	NA	5/5/14 12:33	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Gulf Coast Analytical Labs
Project: Melrose Air Force Range
Sample Matrix: Water

Service Request: R1403127
Date Collected: 4/30/14
Date Received: 5/1/14
Date Analyzed: 5/ 5/14

Matrix Spike Summary
General Chemistry Parameters

Sample Name: MWQ-2
Lab Code: R1403127-006

Units: µg/L
Basis: NA

Analytical Method: 218.6 LL

Analyte Name	Sample Result	MWQ-2MS Matrix Spike R1403127-006MS Result	Spike Amount	% Rec	MWQ-2DMS Duplicate Matrix Spike R1403127-006DMS Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Chromium, Hexavalent, Dissolved	ND	0.198	0.200	99	0.188	0.200	94	90 - 110	5	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Gulf Coast Analytical Labs
Project: Melrose Air Force Range
Sample Matrix: Water

Service Request: R1403127
Date Analyzed: 5/ 5/14

Lab Control Sample Summary
General Chemistry Parameters

Units: µg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R1403127-LCS Result	Spike Amount	% Rec	% Rec Limits
Chromium, Hexavalent, Dissolved	218.6 LL	0.219	0.200	110	90 - 110

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Gulf Coast Analytical Labs
Project: Melrose Air Force Range

Service Request: R1403127

Continuing Calibration Verification (CCV) Summary
Chromium, Hexavalent, Dissolved

Analytical Method: 218.6 LL

Units: ppb

	Analysis Lot	Lab Code	Date Analyzed	True Value	Measured Value	Percent Recovery	Acceptance Limits
CCV1	391255	RQ1404662-03	5/5/14 12:24	0.500	0.523	105	95 - 105
CCV2	391255	RQ1404662-04	5/5/14 14:59	0.500	0.484	97	95 - 105
CCV3	391255	RQ1404662-05	5/5/14 16:42	0.500	0.511	102	95 - 105
CCV4	391255	RQ1404662-06	5/5/14 18:31	0.500	0.507	101	95 - 105

Client: Gulf Coast Analytical Labs
Project: Melrose Air Force Range

Service Request: R1403127

Continuing Calibration Blank (CCB) Summary
Chromium, Hexavalent, Dissolved

Analytical Method: 218.6 LL

Units: µg/L

	Analysis Lot	Lab Code	Date Analyzed	MDL	MRL	Result	Q
CCB1	391255	RQ1404662-07	5/5/14 12:33	0.014	0.020	0.020	U
CCB2	391255	RQ1404662-08	5/5/14 15:07	0.014	0.020	0.020	U
CCB3	391255	RQ1404662-09	5/5/14 16:56	0.014	0.020	0.020	U
CCB4	391255	RQ1404662-10	5/5/14 18:39	0.014	0.020	0.020	U

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Page 1 of 1

Project Number: A012-108

Chain of Custody Number (1): 14042902

Project Name / Site Name: Melrose Annual 2014

Facility: Melrose Air Force Range

Client Name: USACE ABQ

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart (251) 709-6509

Turn Around Time

24 Hour ☐
7 Day ☐
Standard X
Other ☐

Sample Analysis Requested (6) | **Quality Assurance Samples (7)**

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	Sample Code (2)	Sample Number (3)	Sample Matrix (4)	Sample Method (5)	Number of Containers	Chromium (VI) 218.6									Sampler's Initials	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID (Alphabetical Notation)
MWQ-19		29042014	0841		N	1	WG		1	X													B
MWQ-18		29042014	0931		N	1	WG		1	X													B
MWQ-21		29042014	1241		N	1	WG		1	X													B
				-																			
				-																			
				-																			
				-																			
				-																			
				-																			
				-																			
				-																			
				-																			
				-																			
				-																			
				-																			
				-																			
				-																			
				-																			
				-																			
				-																			
				-																			

Comments:

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received by (Signed)	Date	Time
1.		4-29-14	1530			
2.						
3.					4/30/14	0940

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab.	No	Shipped: No.:	1
Method of Shipment:	Fedex	Airbill Number:	
Analytical Lab:	ALS	Delivery Location:	Rochester, NY
Lab Recipient:		Delivery Date/Time:	

1.) Chain of Custody Number = site name (e.g., SS-125) and then date (yymmdd) collected + custody number (e.g. SS1251207201)., July 20, 2012. (12 Characters Max; No Dashes)

2.) Sample Type Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike (-ms), SD = Matrix Spike Duplicate (-sd), AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-01 on 07/20/12 = 1, if sampled again on 07/20/12 = 2, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Ground Water , WS = Surface Water , SO = Soil, SE = Sediment, SL = Sludge, SS= Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ = Soil Blanks

5.) Sample Method Codes: CS = Composite Sample, E2 = Elec. Submersible Pump (1982 +), G = Grab, H = Hollow Stem Auger, PP = Peristaltic Pump, W = Swab or Wipe. (See handout for more methods)

6.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

7.) Quality assurance samples are assigned by date and the number (dd/mm/yy/nn) of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or ambient blank collected on July 20, 2012 in association with samples on the COC will be designated 20071201 in the Blank Lot Control Number field).

NOTES: Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c. ERPIMS LOCID for TB, EB and AB are designated as FIELDQC' samples

6 0 0 8 5

R1403127 5
Gulf Coast Analytical Labs
Melrose Air Force Range

Cooler Receipt and Preservation Check Form

R1403127 5
Gulf Coast Analytical Labs
Melrose Air Force Range

Project/Client KCA Folder Number 414-3127

Cooler received on 4/30/14 by: @ COURIER: ALS UPS FEDEX VELOCITY CLIENT

1.	Were custody seals on outside of cooler?	YES	NO
2.	Were custody papers properly filled out (ink, signed, etc.)?	YES	NO
3.	Did all bottles arrive in good condition (unbroken)?	YES	NO
4.	Did VOA vials, Alkalinity, or Sulfide have significant* air bubbles?	YES	NO N/A
5.	Were **Ice** or **Ice packs** present?	YES	NO
6.	Where did the bottles originate?	ALS/ROC, CLIENT	
7.	Soil VOA samples received as:	Bulk Jar	Encore TerraCore Lab5035set N/A
8.	Temperature of cooler(s) upon receipt:	2.4°	

Is the temperature within 0° - 6° C?: (Y) N Y N Y N Y N Y N

If No, Explain Below Date/Time Temperatures Taken: 4/30/14 0945

Thermometer ID: IR GUN#3 / IR GUN#4 Reading From: Temp Blank / Sample Bottle

If out of Temperature, note packing/ice condition &Client Approval to Run Samples:

All Samples held in storage location R-001 by @ on 4/30/14 at 0950
5035 samples placed in storage location ____ by ____ on ____ at ____

PC Secondary Review: [signature]

Cooler Breakdown: Date: 4/30/14 Time: 1603 by: SS

1.	Were all bottle labels complete (*i.e.* analysis, preservation, etc.)?	YES	NO
2.	Did all bottle labels and tags agree with custody papers?	YES	NO
3.	Were correct containers used for the tests indicated?	YES	NO
4.	Air Samples: Cassettes / Tubes Intact	Canisters Pressurized	Tedlar® Bags Inflated N/A

Explain any discrepancies:

pH	Reagent	YES	NO	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3								
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For TCN Phenol and 522			If present, contact PM to add ascorbic acid Or sodium sulfite (522)					
	$Na_2S_2O_3$	-	-						
	Zn Aceta	-	-						
	HCl	*	*						

*Not to be tested before analysis – pH tested and recorded by VOAs or GenChem on a separate worksheet

Yes = All samples OK

No = Samples were preserved at lab as listed

PM OK to Adjust: ____

Bottle lot numbers: 112612 - 2VV.
Other Comments:

PC Secondary Review: [signature]

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Project Number: A012-108

Chain of Custody Number (1): 14043002

Project Name / Site Name: Melrose Annual 2014

Facility: Melrose Air Force Range

Client Name: USACE ABQ

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart (251) 709-6509

Turn Around Time:
- 24 Hour ☐
- 7 Day ☐
- Standard X
- Other ☐

Sample Analysis Requested (6) | Quality Assurance Samples (7)

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	Sample Code (3)	Sample Number (4)	Sample Matrix (5)	Sample Method (5)	Number of Containers	Chromium (VI) 218.6								Sampler's Initials	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID (Alphabetical Number)
MWQ-22		30 04 2014	0841		N	1	WG		1	X												C
MWQ-22-a		30 04 2014	0841		FD	1	WG		1	X												C
MWQ-2		30 04 2014	1046		N	1	WG		1	X												C
MWQ-2-ms		30 04 2014	1046		MS	1	WG		1	X												C
MWQ-2-sd		30 04 2014	1046		SD	1	WG		1	X												C
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

Comments:

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time
1.		4/30/14	1400
2.			
3.			

	Received by (Signed)	Date	Time
1.			
2.			
3.		5/1/14	0938

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:	No	Shipped: No.:	1
Method of Shipment:	Fedex	Airbill Number:	
Analytical Lab:	ALS	Delivery Location:	Rochester, NY
Lab Recipient:		Delivery Date/Time:	

1.) Chain of Custody Number = site name (e.g., SS-125) and then date (yymmdd) collected + custody number (e.g. SS125120720l)...July 20, 2012 (12 Characters Max No Dashes)

2.) Sample Type Codes: N = Normal Sample, TB = Trip Blank (-t) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike (-ms), SD = Matrix Spike Duplicate (-sd), AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-01 on 07/20/12 = 1, if sampled again on 07/20/12 = 2, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Ground Water, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS= Suface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ= Soil Blanks

5.) Sample Method Codes: CS = Composite Sample, E2 = Elec. Submersible Pump (1982 +), G = Grab, H = Hollow Stem Auger, PP = Peristaltic Pump, W = Swab or Wipe. (See handout for more methods)

6.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

7.) Quality assurance samples are assigned by date and the number (ddmmyyyne) of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or ambient blank collected on July 20, 2012 in association with samples on the COC will be designated 20071201 in the Blank Lot Control Number field).

NOTES: Trip Blanks shall correspond to the first well sampled with VOCs, for example: STD69-MW-08S-c. ERPIMS LOCID for TB, EB and AB are designated as FIELDQC samples

R1403127
Gulf Coast Analytical Labs
Melrose Air Force Range
5

Cooler Receipt and Preservation Check Form

R1403127 5
Gulf Coast Analytical Labs
Melrose Air Force Range

Project/Client Gulf Coast Folder Number R14-3127

Cooler received on 5/1/14 by: AD COURIER: ALS UPS (FEDEX) VELOCITY CLIENT

1.	Were custody seals on outside of cooler?	(YES)	NO
2.	Were custody papers properly filled out (ink, signed, etc.)?	(YES)	NO
3.	Did all bottles arrive in good condition (unbroken)?	(YES)	NO
4.	Did VOA vials, Alkalinity, or Sulfide have significant* air bubbles?	YES	NO (N/A)
5.	Were **Ice** or **Ice packs** present?	(YES)	NO
6.	Where did the bottles originate?	(ALS/ROC), CLIENT	
7.	Soil VOA samples received as:	Bulk Jar	Encore TerraCore Lab5035set (N/A)
8.	Temperature of cooler(s) upon receipt:	2.0°	

Is the temperature within 0° - 6° C?:	(Y)	N	Y	N	Y	N	Y	N	Y N

If No, Explain Below Date/Time Temperatures Taken: 5/1/14 0936

Thermometer ID: (IR GUN#3) / IR GUN#4 Reading From: Temp Blank / (Sample Bottle)

If out of Temperature, note packing/ice condition &Client Approval to Run Samples:

All Samples held in storage location R-002 by AD on 5/1/14 at 0938
5035 samples placed in storage location _____ by _____ on _____ at _____

PC Secondary Review: AW

Cooler Breakdown: Date: 5/1/14 Time: 1320 by: AD

1.	Were all bottle labels complete (*i.e.* analysis, preservation, etc.)?	(YES)	NO
2.	Did all bottle labels and tags agree with custody papers?	(YES)	NO
3.	Were correct containers used for the tests indicated?	(YES)	NO
4.	Air Samples: Cassettes / Tubes Intact	Canisters Pressurized	Tedlar® Bags Inflated (N/A)

Explain any discrepancies:

pH	Reagent	YES	NO	Lot Received	Exp
≥12	NaOH				
≤2	HNO_3				
≤2	H_2SO_4				
<4	$NaHSO_4$				
Residual Chlorine (-)	For TCN Phenol and 522			If present, contact PM to add ascorbic acid Or sodium sulfite (522)	
	$Na_2S_2O_3$	-	-		
	Zn Aceta	-	-		
	HCl	*	*		

Sample ID	Vol. Added	Lot Added	Final pH

*Not to be tested before analysis – pH tested and recorded by VOAs or GenChem on a separate worksheet

Yes = All samples OK

No = Samples were preserved at lab as listed

PM OK to Adjust: _____

Bottle lot numbers: ~~121213-2VV~~ 112612-2VV

Other Comments:

Cr^{+6} Buffer : WC126185G Exp. 3/15

PC Secondary Review: _____

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

TRINITY ANALYSIS & DEVELOPMENT CORP
Environmental & Engineering Services

Chain of Custody and Analytical Request

Project Number: A012-108

Chain of Custody Number (1): 14050102

Project Name / Site Name: Melrose Annual 2014

Facility: Melrose Air Force Range

Client Name: USACE ABQ

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart (251) 709-6509

Turn Around Time

- 24 Hour ☐
- 7 Day ☐
- Standard X
- Other ☐

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	Sample Code (2)	Sample Number (3)	Sample Matrix (4)	Sample Method (5)	Number of Containers	Chromium (VI) 218.6								Sampler's Initials	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Codes ID (Alphabetical Number)
MW2-14		01052014	0751		N	1	WG		1	X												B
MW2-20		01052014	1016		N	1	WG		1	X												B

Comments:

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received by (Signed)	Date	Time
1.		5/11/14	1400	1.		
2.				2.		
3.				3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab	NP	Shipped: No.:	1
Method of Shipment:	Fedex	Airbill Number:	
Analytical Lab:	ALS	Delivery Location:	Rochester NY
Lab Recipient:		Delivery Date/Time:	5/14 9:58

1.) Chain of Custody Number = site name (e.g., SS-125) and then date (yymmdd) collected + custody number (e.g. SS125120720l)... July 20, 2012. (12 Characters Max; No Dashes)

2.) Sample Type Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike (-ms), SD = Matrix Spike Duplicate (-sd), AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-01 on 07/20/12 = 1, if sampled again on 07/20/12 = 2, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Ground Water , WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS= Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ= Soil Blanks

5.) Sample Method Codes: CS = Composite Sample, B2 = Elec. Submersible Pump (1932 =), G = Grab, H = Hollow Stem Auger, PP = Peristaltic Pump, W = Swab or Wipe, (See handout for more methods)

6.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

7.) Quality assurance samples are assigned by date and the number (ddmmyyxx) of the associated QC sample (01, 02, etc). IE g., The first equipment blank, trip blank, or ambient blank collected on July 20, 2012 in association with samples on the COC will be designated 20071201 in the Blank Lot Control Number field).

NOTES: Trip Blanks shall correspond to the first well sampled with VOCs, for example ST069-MW-088-e. ERPIMS LOCID for TB, EB and AB are designated as TRIP, EQUIP samples.

R1403127 5
Gulf Coast Analytical Labs
Melrose Air Force Range

Cooler Receipt and Preservation Check Form

Project/Client _____ Folder Number R14-3127

Cooler received on 5-2-14 by: HE COURIER: ALS UPS (FEDEX) VELOCITY CLIENT

1.	Were custody seals on outside of cooler?	(YES)	NO
2.	Were custody papers properly filled out (ink, signed, etc.)?	(YES)	NO
3.	Did all bottles arrive in good condition (unbroken)?	(YES)	NO
4.	Did VOA vials, Alkalinity, or Sulfide have significant* air bubbles?	YES	NO (N/A)
5.	Were **Ice** or **Ice packs** present?	(YES)	NO
6.	Where did the bottles originate?	(ALS/ROC)	CLIENT

7.	Soil VOA samples received as:	Bulk Jar	Encore	TerraCore	Lab5035set	(N/A)
8.	Temperature of cooler(s) upon receipt:	2.8°				
	Is the temperature within 0° - 6° C?:	(Y) N	Y N	Y N	Y N	Y N

If No, Explain Below Date/Time Temperatures Taken: 5-2-14 @ 10:14

Thermometer ID: IR GUN#3 / (IR GUN#4) Reading From: Temp Blank / (Sample Bottle)

If out of Temperature, note packing/ice condition &Client Approval to Run Samples: _____

All Samples held in storage location SMO R-008 by HE on 5-2-14 at 1015

5035 samples placed in storage location HE5-2-14 by _____ on _____ at _____

PC Secondary Review: _____

Cooler Breakdown: Date: 5/2/14 Time: 1800 by: (illegible)

1.	Were all bottle labels complete (*i.e.* analysis, preservation, etc.)?	(YES)	NO
2.	Did all bottle labels and tags agree with custody papers?	(YES)	NO
3.	Were correct containers used for the tests indicated?	(YES)	NO
4.	Air Samples: Cassettes / Tubes Intact	Canisters Pressurized	Tedlar® Bags Inflated (N/A)

Explain any discrepancies: _____

pH	Reagent	YES	NO	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3								
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For TCN Phenol and 522			If present, contact PM to add ascorbic acid Or sodium sulfite (522)					
	$Na_2S_2O_3$	-	-						
	Zn Aceta	-	-						
	HCl	*	*						

*Not to be tested before analysis – pH tested and recorded by VOAs or GenChem on a separate worksheet

Yes = All samples OK

No = Samples were preserved at lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 121612-2VV

Other Comments:

CTH Buffer: WC1261856 Exp. 3/15

PC Secondary Review: _____

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

May 20, 2014

Sean Hardin
GCAL LAB
7979 GSRI AVENUE
BATON ROUGE, LA 70820
TEL: (225) 769-4900
FAX (225) 767-5717

Order No.: 1405047

RE: DoD Perchlorate

Dear Sean Hardin:

DHL Analytical, Inc. received 8 sample(s) on 5/6/2014 for the analyses presented in the following report.

There were no problems with the analyses and all data met requirements of DoD QSM Ver 4.2 and NELAC except where noted in the Case Narrative. All non-NELAC methods will be identified accordingly in the case narrative and all estimated uncertainties of test results are within method or EPA specifications.

If you have any questions regarding these tests results, please feel free to call. This report shall not be reproduced except in full without the written approval of DHL Analytical, Inc. Thank you for using DHL Analytical.

Sincerely,

John DuPont
General Manager

This report was performed under the accreditation of the State of Texas & DoD Laboratory Certification Number: T104704211-14-12 & DoD-ELAP #L14-26

Table of Contents

Miscellaneous Documents **3**

CaseNarrative 1405047 ..... **9**

WorkOrderSampleSummary 1405047 ..... **10**

PrepDatesReport 1405047 ..... **11**

AnalyticalDatesReport 1405047 ..... **12**

Analytical Report 1405047 ..... **13**

AnalyticalQCSummaryReport 1405047 ..... **21**

Sequence Report 1405047 ..... **25**

GCAL
ANALYTICAL LABORATORIES, LLC

7979 INNOVATION PARK DR, BATON ROUGE LA 70820-7402
(225) 769-4900 FAX (225) 767-5717

Chain of Custody Record

1405047

Submitted by		Bill to	
Client:	Gulf Coast Analytical Labs	Client:	Gulf Coast Analytical Labs
Address:	7979 Innovation Park Dr. Baton Rouge LA 70820	Address:	7979 Innovation Park Dr. Baton Rouge LA 70820
Contact:	Sean Hardin	Contact:	Sean Hardin
Phone:	225-769-4900	Phone:	225-769-4900
Fax:	225-767-5717	Fax:	225-767-5717

P.O. Number: 14-0333

Project Name/Number: 214043009

Sampled By:

Analysis Requested: Perchlorate by 6860

* Our P. O. Number must appear on the Invoice.

* Our Project Number must appear on the final report.

Rec temp 2.6
2 hour #57
Custody seal
intact

	Matrix	Date	Time (2400)	Comp	Grab	Sample Description	Pre-servatives	No. Containers	Perchlorate by 6860	Lab ID / Remarks:
01	W	4/29/2014	8:41		X	MWQ-19	NONE	1	X	21404300901
02	W	4/29/2014	9:31		X	MWQ-18	NONE	1	X	21404300902
03	W	4/29/2014	12:41		X	MWQ-21	NONE	1	X	21404300903
04	W	4/30/2014	8:41		X	MWQ-22	NONE	1	X	21404300904
05	W	4/30/2014	8:41		X	MWQ-22-a	NONE	1	X	21404300905
06	W	4/30/2014	10:46		X	MWQ-2	NONE	1	X	21404300906
	W	4/30/2014	10:46		X	MWQ-2-ms	NONE	1	X	21404300907
	W	4/30/2014	10:46		X	MWQ-2-sd	NONE	1	X	21404300908
07	W	5/1/2014	7:51		X	MWQ-14	NONE	1	X	21404300909
08	W	5/1/2014	10:16		X	MWQ-20	NONE	1	X	21404300910

Turn Around Time: ___ 24 - 48 hrs ___ 3 days ___ 1 week X standard other ___

Relinquished by: (Signature) Allison Nop	Received by: (Signature) FedEx	Date: 5/5/14	Time: 1700
Relinquished by: (Signature)	Received by: (Signature)	Date: 5/6/14	Time: 945
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Note:

EDD Required: ERPIMS and EXCEL EDD

Please emal results to sean.hardin@gcal.com

PLEASE RETURN ICE CHESTS TO 7979 Innovation Park Dr.

Matrix: W = water, S=Soil, SD=Solid, L=Liquid, SL=Sludge, O=Oil, CT=Charcoal Tube, OVM=Organic Vapor Monitor, XT=XAD Tube, A=Air Bag, SUM=Summa Canister

ORIGIN ID:OPLA (225) 769-4900
CHARLOITE SAUCIER
GULF COAST ANALYTICAL LABS INC
7979 INNOVATION DR

BATON ROUGE, LA 70820
UNITED STATES US

SHIP DATE: 05MAY14
ACTWGT: 12.0 LB MAN
CAD: 0291381/CAFE2704

BILL SENDER

TO SAMPLE RECEIVING
DHL
2300 DOUBLE CREEK DRIVE

ROUND ROCK TX 78664
(512) 388-0222

INV:
PO:
REF:
DEPT:

FedEx Express

TRK# 0201 5980 9378 1919

TUE - 06 MAY 10:30A
PRIORITY OVERNIGHT

XH BSMA

78664
TX-US AUS

156146-434 NRIT 02-07

GCAL

ANALYTICAL LABORATORIES, LLC

CUSTODY SEAL

Date Sealed: 5-5-14

This package conforms to the conditions and limitations specified in 49 CFR 173.4

Sealed By: _____

GCAL-17

DHL Analytical, Inc.

Sample Receipt Checklist

Client Name GCAL LAB | Date Received: 5/6/2014

Work Order Number 1405047 | Received by JB

Checklist completed by: JBarlow (Signature) 5/6/2014 (Date) | Reviewed by DL (Initials) 5/6/2014 (Date)

Carrier name FedEx 1day

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	2.6 °C
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH<2 acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted?		Checked by
Water - ph>9 (S) or ph>12 (CN) acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted?		Checked by

Any No response must be detailed in the comments section below.

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

Page 1 of 1

DHL Analytical, Inc.

Laboratory Review Checklist: Reportable Data

Project Name: DoD Perchlorate	**Date:** 5/20/14
Reviewer Name: Carlos Castro	**Laboratory Work Order:** 1405047
Prep Batch Number(s): See Prep Dates Report	**Run Batch:** See Analytical Dates Report

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Chain-of-Custody (C-O-C)					
R1	OI	**1)** Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	**X**				**R1-01**
		2) Were all departures from standard conditions described in an exception report?			**X**		
R2	OI	**Sample and Quality Control (QC) Identification**					
		1) Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	**X**				
		2) Are all laboratory ID numbers cross-referenced to the corresponding QC data?	**X**				
R3	OI	**Test Reports**					
		1) Were all samples prepared and analyzed within holding times?	**X**				
		2) Other than those results < MQL, were all other raw values bracketed by calibration standards?	**X**				
		3) Were calculations checked by a peer or supervisor?	**X**				
		4) Were all analyte identifications checked by a peer or supervisor?	**X**				
		5) Were sample quantitation limits reported for all analytes not detected?	**X**				
		6) Were all results for soil and sediment samples reported on a dry weight basis?			**X**		
		7) Were % moisture (or solids) reported for all soil and sediment samples?			**X**		
		8) If required for the project, TICs reported?			**X**		
R4	O	**Surrogate Recovery Data**					
		1) Were surrogates added prior to extraction?			**X**		
		2) Were surrogate percent recoveries in all samples within the laboratory QC limits?			**X**		
R5	OI	**Test Reports/Summary Forms for Blank Samples**					
		1) Were appropriate type(s) of blanks analyzed?	**X**				
		2) Were blanks analyzed at the appropriate frequency?	**X**				
		3) Where method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	**X**				
		4) Were blank concentrations < MQL?	**X**				
R6	OI	**Laboratory Control Samples (LCS):**					
		1) Were all COCs included in the LCS?	**X**				
		2) Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	**X**				
		3) Were LCSs analyzed at the required frequency?	**X**				
		4) Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	**X**				
		5) Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	**X**				
		6) Was the LCSD RPD within QC limits (if applicable)?	**X**				
R7	OI	**Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Data**					
		1) Were the project/method specified analytes included in the MS and MSD?	**X**				
		2) Were MS/MSD analyzed at the appropriate frequency?	**X**				
		3) Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		**X**			**R7-03**
		4) Were MS/MSD RPDs within laboratory QC limits?	**X**				
R8	OI	**Analytical Duplicate Data**					
		1) Were appropriate analytical duplicates analyzed for each matrix?			**X**		
		2) Were analytical duplicates analyzed at the appropriate frequency?			**X**		
		3) Were RPDs or relative standard deviations within the laboratory QC limits?			**X**		
R9	OI	**Method Quantitation Limits (MQLs):**					
		1) Are the MQLs for each method analyte included in the laboratory data package?	**X**				
		2) Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	**X**				
		3) Are unadjusted MQLs included in the laboratory data package?	**X**				
R10	OI	**Other Problems/Anomalies**					
		1) Are all known problems/anomalies/special conditions noted in this LRC and ER?	**X**				
		2) Were all necessary corrective actions performed for the reported data?	**X**				
		3) Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	**X**				

1 Items identified by the letter "R" should be included in the laboratory data package submitted to the TCEQ in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).
3 NA = Not applicable.
4 NR = Not Reviewed.
5 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

DHL Analytical, Inc.
Laboratory Review Checklist (continued): Supporting Data

Project Name: DoD Perchlorate | **Date:** 5/20/14

Reviewer Name: Carlos Castro | **Laboratory Work Order:** 1405047

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial Calibration (ICAL)**					
		1) Were response factors and/or relative response factors for each analyte within QC limits?	**X**				
		2) Were percent RSDs or correlation coefficient criteria met?	**X**				
		3) Was the number of standards recommended in the method used for all analytes?	**X**				
		4) Were all points generated between the lowest and highest standard used to calculate the curve?	**X**				
		5) Are ICAL data available for all instruments used?	**X**				
		6) Has the initial calibration curve been verified using an appropriate second source standard?	**X**				
S2	OI	**Initial and Continuing calibration Verification (ICCV and CCV) and Continuing Calibration blank (CCB)**					
		1) Was the CCV analyzed at the method-required frequency?	**X**				
		2) Were percent differences for each analyte within the method-required QC limits?	**X**				
		3) Was the ICAL curve verified for each analyte?	**X**				
		4) Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	**X**				
S3	O	**Mass Spectral Tuning**					
		1) Was the appropriate compound for the method used for tuning?	**X**				
		2) Were ion abundance data within the method-required QC limits?	**X**				
S4	O	**Internal Standards (IS)**					
		1) Were IS area counts and retention times within the method-required QC limits?		**X**			**S4-01**
S5	OI	**Raw Data (NELAC section 1 appendix A glossary, and section 5.12)**					
		1) Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	**X**				
		2) Were data associated with manual integrations flagged on the raw data?	**X**				
S6	O	**Dual Column Confirmation**					
		1) Did dual column confirmation results meet the method-required QC?			**X**		
S7	O	**Tentatively Identified Compounds (TICs)**					
		1) If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			**X**		
S8	I	**Interference Check Sample (ICS) Results**					
		1) Were percent recoveries within method QC limits?	**X**				
S9	I	**Serial Dilutions, Post Digestion Spikes, and Method of Standard Additions**					
		1) Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	**X**				
S10	OI	**Method Detection Limit (MDL) Studies**					
		1) Was a MDL study performed for each reported analyte?	**X**				
		2) Is the MDL either adjusted or supported by the analysis of DCSs?	**X**				
S11	OI	**Proficiency Test Reports**					
		1) Was the lab's performance acceptable on the applicable proficiency tests or evaluation studies?	**X**				
S12	OI	**Standards Documentation**					
		1) Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	**X**				
S13	OI	**Compound/Analyte Identification Procedures**					
		1) Are the procedures for compound/analyte identification documented?	**X**				
S14	OI	**Demonstration of Analyst Competency (DOC)**					
		1) Was DOC conducted consistent with NELAC Chapter 5C?	**X**				
		2) Is documentation of the analyst's competency up-to-date and on file?	**X**				
S15	OI	**Verification/Validation Documentation for Methods (NELAC Chap 5)**					
		1) Are all the methods used to generate the data documented, verified, and validated, where applicable?	**X**				
S16	OI	**Laboratory Standard Operating Procedures (SOPs)**					
		1) Are laboratory SOPs current and on file for each method performed?	**X**				

1 Items identified by the letter "R" should be included in the laboratory data package submitted to the TCEQ in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).
3 NA = Not applicable.
4 NR = Not Reviewed.
5 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Data Package Signature Page

This data package consists of:

This signature page, the laboratory review checklist, and the following reportable data:

R1 Field chain-of-custody documentation;
R2 Sample identification cross-reference;
R3 Test reports (analytical data sheets) for each environmental sample that includes:
  a) Items consistent with NELAC 5.13
  b) dilution factors,
  c) preparation methods,
  d) cleanup methods, and
  e) if required for the project, tentatively identified compounds (TICs).
R4 Surrogate recovery data including:
  a) Calculated recovery (%R), and
  b) The laboratory's surrogate QC limits.
R5 Test reports/summary forms for blank samples;
R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  a) LCS spiking amounts,
  b) Calculated %R for each analyte, and
  c) The laboratory's LCS QC limits.
R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a) Samples associated with the MS/MSD clearly identified,
  b) MS/MSD spiking amounts,
  c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d) Calculated %Rs and relative percent differences (RPDs), and
  e) The laboratory's MS/MSD QC limits
R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  a) the amount of analyte measured in the duplicate,
  b) the calculated RPD, and
  c) the laboratory's QC limits for analytical duplicates.
R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;
R10 Other problems or anomalies.

The Exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

Release Statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

John DuPont – General Manager

Scott Schroeder – Technical Director

Signature

05/20/14

Date

DHL Analytical, Inc. **Date:** *20-May-14*

CLIENT: GCAL LAB
Project: DoD Perchlorate
Lab Order: 1405047

CASE NARRATIVE

This case narrative describes abnormalities and deviations that may affect the results and summarizes all known issues that need to be highlighted for the data user to assess the results. This case narrative and the report contents are compliant with DoD QSM Ver 4.2 and NELAC. The "U" flag , in the Analytical Report, indicates the results for that sample are nondetect.

Samples were analyzed using the methods outlined in the following references:

Method SW6860 - Perchlorate Analysis (Parameter is ELAP Accredited but not NELAC Certified)

Exception Report R1-01

The samples were received on and log-in performed on 5/6/14. A total of 8 samples were received and all were analyzed. The samples arrived in good condition and were properly packaged.

Exception Report R7-03

For Perchlorate analysis performed on 5/13/14 the matrix spike and matrix spike duplicate recoveries (1404319-01 MS/MSD) were above control limits. These are flagged accordingly in the QC summary report. The sample selected for the matrix spike and matrix spike duplicate was not from this work order. The LCS was within control limits. No further corrective actions were taken.

Exception Report S4-01

For Perchlorate analysis LCVL2-140513 and LCVL1140514 had responses for the internal standard above the upper control limit. These are flagged accordingly in the QC summary report. The Perchlorate recoveries were within control limits. No further corrective actions were taken.

A summary of project communication follows:

Request for quote was sent to DHL Analytical from the client, via email on 5/5/11 and the quote was sent to client via email on 5/5/11. Email for work approved by both parties on 5/18/11 with P.O number 12-0969.

Client sent samples in own containers.

This sample delivery group arrived at DHL Analytical 5/6/14.

DHL Analytical, Inc.

Date: *20-May-14*

CLIENT: GCAL LAB
Project: DoD Perchlorate
Lab Order: 1405047

Work Order Sample Summary

Lab Smp ID	Client Sample ID	Tag Number	Date Collected	Date Recved
1405047-01	MWQ-19		04/29/14 08:41 AM	5/6/2014
1405047-02	MWQ-18		04/29/14 09:31 AM	5/6/2014
1405047-03	MWQ-21		04/29/14 01:41 AM	5/6/2014
1405047-04	MWQ-22		04/30/14 08:41 AM	5/6/2014
1405047-05	MWQ-22-a		04/30/14 08:41 AM	5/6/2014
1405047-06	MWQ-2		04/30/14 10:46 AM	5/6/2014
1405047-07	MWQ-14		05/01/14 07:51 AM	5/6/2014
1405047-08	MWQ-20		05/01/14 10:16 AM	5/6/2014

Lab Order: 1405047
Client: GCAL LAB
Project: DoD Perchlorate

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1405047-01A	MWQ-19	04/29/14 08:41 AM	Aqueous	SW6860	Perchlorate Prep	05/13/14 01:01 PM	63496
1405047-02A	MWQ-18	04/29/14 09:31 AM	Aqueous	SW6860	Perchlorate Prep	05/13/14 01:01 PM	63496
1405047-03A	MWQ-21	04/29/14 01:41 AM	Aqueous	SW6860	Perchlorate Prep	05/13/14 01:01 PM	63496
1405047-04A	MWQ-22	04/30/14 08:41 AM	Aqueous	SW6860	Perchlorate Prep	05/13/14 01:01 PM	63496
1405047-05A	MWQ-22-a	04/30/14 08:41 AM	Aqueous	SW6860	Perchlorate Prep	05/13/14 01:01 PM	63496
1405047-06A	MWQ-2	04/30/14 10:46 AM	Aqueous	SW6860	Perchlorate Prep	05/13/14 01:01 PM	63496
	MWQ-2	04/30/14 10:46 AM	Aqueous	SW6860	Perchlorate Prep	05/13/14 01:01 PM	63496
1405047-07A	MWQ-14	05/01/14 07:51 AM	Aqueous	SW6860	Perchlorate Prep	05/13/14 01:01 PM	63496
1405047-08A	MWQ-20	05/01/14 10:16 AM	Aqueous	SW6860	Perchlorate Prep	05/13/14 01:01 PM	63496

Lab Order: 1405047
Client: GCAL LAB
Project: DoD Perchlorate

ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1405047-01A	MWQ-19	Aqueous	SW6860	Perchlorate - Water	63496	1	05/13/14 10:20 PM	ICMS2_140513B
1405047-02A	MWQ-18	Aqueous	SW6860	Perchlorate - Water	63496	1	05/13/14 10:36 PM	ICMS2_140513B
1405047-03A	MWQ-21	Aqueous	SW6860	Perchlorate - Water	63496	1	05/13/14 10:52 PM	ICMS2_140513B
1405047-04A	MWQ-22	Aqueous	SW6860	Perchlorate - Water	63496	1	05/13/14 11:08 PM	ICMS2_140513B
1405047-05A	MWQ-22-a	Aqueous	SW6860	Perchlorate - Water	63496	1	05/13/14 11:24 PM	ICMS2_140513B
1405047-06A	MWQ-2	Aqueous	SW6860	Perchlorate - Water	63496	1	05/14/14 12:33 PM	ICMS2_140513B
	MWQ-2	Aqueous	SW6860	Perchlorate - Water	63496	1	05/13/14 11:40 PM	ICMS2_140513B
1405047-07A	MWQ-14	Aqueous	SW6860	Perchlorate - Water	63496	1	05/14/14 12:29 AM	ICMS2_140513B
1405047-08A	MWQ-20	Aqueous	SW6860	Perchlorate - Water	63496	1	05/14/14 12:45 AM	ICMS2_140513B

DHL Analytical, Inc.

Date: *20-May-14*

CLIENT:	GCAL LAB	**Client Sample ID:**	MWQ-19
Project:	DoD Perchlorate	**Lab ID:**	1405047-01
Project No:	214043009	**Collection Date:**	04/29/14 08:41 AM
Lab Order:	1405047	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PERCHLORATE - WATER		**SW6860**					Analyst: **AS**
Perchlorate	0.000100	0.000100	0.000300	NU	mg/L	1	05/13/14 10:20 PM
IS: Perchlorate_107	89.3	0	50-150	N	%REC	1	05/13/14 10:20 PM

Qualifiers:	*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
	C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
	E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
	MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
	RL	Reporting Limit	S	Spike Recovery outside control limits
	N	Parameter not NELAC certified		

DHL Analytical, Inc.

Date: *20-May-14*

CLIENT:	GCAL LAB	**Client Sample ID:**	MWQ-18
Project:	DoD Perchlorate	**Lab ID:**	1405047-02
Project No:	214043009	**Collection Date:**	04/29/14 09:31 AM
Lab Order:	1405047	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PERCHLORATE - WATER		**SW6860**					Analyst: **AS**
Perchlorate	0.00283	0.000100	0.000300	N	mg/L	1	05/13/14 10:36 PM
IS: Perchlorate_107	126	0	50-150	N	%REC	1	05/13/14 10:36 PM

Qualifiers:

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

DHL Analytical, Inc.

Date: *20-May-14*

CLIENT:	GCAL LAB	**Client Sample ID:**	MWQ-21
Project:	DoD Perchlorate	**Lab ID:**	1405047-03
Project No:	214043009	**Collection Date:**	04/29/14 01:41 AM
Lab Order:	1405047	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PERCHLORATE - WATER		**SW6860**					Analyst: **AS**
Perchlorate	0.00559	0.000100	0.000300	N	mg/L	1	05/13/14 10:52 PM
IS: Perchlorate_107	115	0	50-150	N	%REC	1	05/13/14 10:52 PM

Qualifiers:

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

DHL Analytical, Inc.

Date: *20-May-14*

CLIENT:	GCAL LAB	**Client Sample ID:**	MWQ-22
Project:	DoD Perchlorate	**Lab ID:**	1405047-04
Project No:	214043009	**Collection Date:**	04/30/14 08:41 AM
Lab Order:	1405047	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PERCHLORATE - WATER		**SW6860**					Analyst: **AS**
Perchlorate	0.000100	0.000100	0.000300	NU	mg/L	1	05/13/14 11:08 PM
IS: Perchlorate_107	125	0	50-150	N	%REC	1	05/13/14 11:08 PM

Qualifiers:	*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
	C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
	E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
	MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
	RL	Reporting Limit	S	Spike Recovery outside control limits
	N	Parameter not NELAC certified		

DHL Analytical, Inc.

Date: *20-May-14*

CLIENT:	GCAL LAB	**Client Sample ID:**	MWQ-22-a
Project:	DoD Perchlorate	**Lab ID:**	1405047-05
Project No:	214043009	**Collection Date:**	04/30/14 08:41 AM
Lab Order:	1405047	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PERCHLORATE - WATER		**SW6860**					Analyst: **AS**
Perchlorate	0.000100	0.000100	0.000300	NU	mg/L	1	05/13/14 11:24 PM
IS: Perchlorate_107	127	0	50-150	N	%REC	1	05/13/14 11:24 PM

Qualifiers:	*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
	C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
	E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
	MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
	RL	Reporting Limit	S	Spike Recovery outside control limits
	N	Parameter not NELAC certified		

DHL Analytical, Inc.

Date: *20-May-14*

CLIENT:	GCAL LAB	**Client Sample ID:**	MWQ-2
Project:	DoD Perchlorate	**Lab ID:**	1405047-06
Project No:	214043009	**Collection Date:**	04/30/14 10:46 AM
Lab Order:	1405047	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PERCHLORATE - WATER		**SW6860**					Analyst: **AS**
Perchlorate	0.000100	0.000100	0.000300	NU	mg/L	1	05/14/14 12:33 PM
IS: Perchlorate_107	85.2	0	50-150	N	%REC	1	05/14/14 12:33 PM

Qualifiers:	*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
	C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
	E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
	MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
	RL	Reporting Limit	S	Spike Recovery outside control limits
	N	Parameter not NELAC certified		

DHL Analytical, Inc.

Date: *20-May-14*

CLIENT:	GCAL LAB	**Client Sample ID:**	MWQ-14
Project:	DoD Perchlorate	**Lab ID:**	1405047-07
Project No:	214043009	**Collection Date:**	05/01/14 07:51 AM
Lab Order:	1405047	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PERCHLORATE - WATER		**SW6860**					Analyst: **AS**
Perchlorate	0.00260	0.000100	0.000300	N	mg/L	1	05/14/14 12:29 AM
IS: Perchlorate_107	108	0	50-150	N	%REC	1	05/14/14 12:29 AM

Qualifiers:	*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
	C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
	E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
	MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
	RL	Reporting Limit	S	Spike Recovery outside control limits
	N	Parameter not NELAC certified		

DHL Analytical, Inc.

Date: *20-May-14*

CLIENT:	GCAL LAB	**Client Sample ID:**	MWQ-20
Project:	DoD Perchlorate	**Lab ID:**	1405047-08
Project No:	214043009	**Collection Date:**	05/01/14 10:16 AM
Lab Order:	1405047	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PERCHLORATE - WATER		**SW6860**					Analyst: **AS**
Perchlorate	0.000100	0.000100	0.000300	NU	mg/L	1	05/14/14 12:45 AM
IS: Perchlorate_107	79.5	0	50-150	N	%REC	1	05/14/14 12:45 AM

Qualifiers:	*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
	C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
	E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
	MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
	RL	Reporting Limit	S	Spike Recovery outside control limits
	N	Parameter not NELAC certified		

CLIENT: GCAL LAB
Work Order: 1405047
Project: DoD Perchlorate

ANALYTICAL QC SUMMARY REPORT

RunID: ICMS2_140513B

The QC data in batch 63496 applies to the following samples: 1405047-01A, 1405047-02A, 1405047-03A, 1405047-04A, 1405047-05A, 1405047-06A, 1405047-07A, 1405047-08A

Sample ID **MB-63496** Batch ID: **63496** TestNo: **SW6860** Units: **mg/L**
SampType: **MBLK** Run ID: **ICMS2_140513B** Analysis Date: **5/13/2014 5:31:00 PM** Prep Date: **5/13/2014**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.000100	0.000300								NU
IS: Perchlorate_107	0.00101		0.00100		145	50	150			N

Sample ID **LCS-63496** Batch ID: **63496** TestNo: **SW6860** Units: **mg/L**
SampType: **LCS** Run ID: **ICMS2_140513B** Analysis Date: **5/13/2014 5:47:00 PM** Prep Date: **5/13/2014**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.000287	0.000300	0.000300	0	95.6	85	115			N
IS: Perchlorate_107	0.00101		0.00100		150	50	150			N

Sample ID **1404319-01AMS** Batch ID: **63496** TestNo: **SW6860** Units: **mg/L**
SampType: **MS** Run ID: **ICMS2_140513B** Analysis Date: **5/13/2014 6:19:00 PM** Prep Date: **5/13/2014**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.00181	0.000300	0.000300	0.00142	129	85	115			SN
IS: Perchlorate_107	0.00101		0.00100		135	50	150			N

Sample ID **1405047-06AMS** Batch ID: **63496** TestNo: **SW6860** Units: **mg/L**
SampType: **MS** Run ID: **ICMS2_140513B** Analysis Date: **5/13/2014 11:56:00 PM** Prep Date: **5/13/2014**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.000282	0.000300	0.000300	0	93.9	85	115			N
IS: Perchlorate_107	0.00101		0.00100		105	50	150			N

Sample ID **1405047-06AMSD** Batch ID: **63496** TestNo: **SW6860** Units: **mg/L**
SampType: **MSD** Run ID: **ICMS2_140513B** Analysis Date: **5/14/2014 12:12:00 AM** Prep Date: **5/13/2014**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.000290	0.000300	0.000300	0	96.6	85	115	2.83	20	N
IS: Perchlorate_107	0.00101		0.00100		91.4	50	150	0	0	N

Sample ID **1404319-01AMSD** Batch ID: **63496** TestNo: **SW6860** Units: **mg/L**
SampType: **MSD** Run ID: **ICMS2_140513B** Analysis Date: **5/14/2014 12:57:00 PM** Prep Date: **5/13/2014**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.00181	0.000300	0.000300	0.00142	128	85	115	0.168	20	SN
IS: Perchlorate_107	0.00101		0.00100		114	50	150	0	0	N

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAC certified

CLIENT: GCAL LAB
Work Order: 1405047
Project: DoD Perchlorate

ANALYTICAL QC SUMMARY REPORT

RunID: ICMS2_140513B

Sample ID **ICV-140513**	Batch ID: **R73097**	TestNo: **SW6860**	Units: **mg/L**
SampType: **ICV**	Run ID: **ICMS2_140513B**	Analysis Date: **5/13/2014 10:15:00 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.00193	0.000300	0.00200	0	96.7	85	115			N
IS: Perchlorate_107	0.00100		0.00100		128	50	150			N

Sample ID **LCVL-140513**	Batch ID: **R73097**	TestNo: **SW6860**	Units: **mg/L**
SampType: **LCVL**	Run ID: **ICMS2_140513B**	Analysis Date: **5/13/2014 10:31:00 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.000196	0.000300	0.000200	0	98.0	70	130			N
IS: Perchlorate_107	0.00100		0.00100		138	50	150			N

Sample ID **ICS-140513**	Batch ID: **R73097**	TestNo: **SW6860**	Units: **mg/L**
SampType: **ICS**	Run ID: **ICMS2_140513B**	Analysis Date: **5/13/2014 10:47:00 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.000271	0.000300	0.000300	0	90.3	70	130			N
IS: Perchlorate_107	0.00100		0.00100		115	50	150			N

Sample ID **CCV1-140513**	Batch ID: **R73097**	TestNo: **SW6860**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICMS2_140513B**	Analysis Date: **5/13/2014 4:16:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.00483	0.000300	0.00500	0	96.6	85	115			N
IS: Perchlorate_107	0.00100		0.00100		139	50	150			N

Sample ID **LCVL2-140513**	Batch ID: **R73097**	TestNo: **SW6860**	Units: **mg/L**
SampType: **LCVL**	Run ID: **ICMS2_140513B**	Analysis Date: **5/13/2014 4:36:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.000195	0.000300	0.000200	0	97.5	70	130			N
IS: Perchlorate_107	0.00100		0.00100		164	50	150			SN

Sample ID **CCV2-140513**	Batch ID: **R73097**	TestNo: **SW6860**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICMS2_140513B**	Analysis Date: **5/13/2014 9:16:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.00486	0.000300	0.00500	0	97.2	85	115			N
IS: Perchlorate_107	0.00100		0.00100		120	50	150			N

Qualifiers:

B	Analyte detected in the associated Method Blank
J	Analyte detected between MDL and RL
ND	Not Detected at the Method Detection Limit
RL	Reporting Limit
J	Analyte detected between SDL and RL
DF	Dilution Factor
MDL	Method Detection Limit
R	RPD outside accepted control limits
S	Spike Recovery outside control limits
N	Parameter not NELAC certified

CLIENT: GCAL LAB
Work Order: 1405047
Project: DoD Perchlorate

ANALYTICAL QC SUMMARY REPORT

RunID: ICMS2_140513B

Sample ID **LCVL3-140513**	Batch ID: **R73097**	TestNo: **SW6860**	Units: **mg/L**
SampType: **LCVL**	Run ID: **ICMS2_140513B**	Analysis Date: **5/13/2014 9:32:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.000196	0.000300	0.000200	0	98.0	70	130			N
IS: Perchlorate_107	0.00100		0.00100		145	50	150			N

Sample ID **CCV3-140513**	Batch ID: **R73097**	TestNo: **SW6860**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICMS2_140513B**	Analysis Date: **5/14/2014 1:01:00 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.00483	0.000300	0.00500	0	96.6	85	115			N
IS: Perchlorate_107	0.00100		0.00100		107	50	150			N

Sample ID **LCVL4-140513**	Batch ID: **R73097**	TestNo: **SW6860**	Units: **mg/L**
SampType: **LCVL**	Run ID: **ICMS2_140513B**	Analysis Date: **5/14/2014 1:17:00 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.000217	0.000300	0.000200	0	108	70	130			N
IS: Perchlorate_107	0.00100		0.00100		132	50	150			N

Sample ID **ICV-140514**	Batch ID: **R73097**	TestNo: **SW6860**	Units: **mg/L**
SampType: **ICV**	Run ID: **ICMS2_140513B**	Analysis Date: **5/14/2014 10:13:00 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.00195	0.000300	0.00200	0	97.5	85	115			N
IS: Perchlorate_107	0.00100		0.00100		136	50	150			N

Sample ID **LCVL1-140514**	Batch ID: **R73097**	TestNo: **SW6860**	Units: **mg/L**
SampType: **LCVL**	Run ID: **ICMS2_140513B**	Analysis Date: **5/14/2014 10:29:00 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.000191	0.000300	0.000200	0	95.5	70	130			N
IS: Perchlorate_107	0.00100		0.00100		152	50	150			SN

Sample ID **ICS-140514**	Batch ID: **R73097**	TestNo: **SW6860**	Units: **mg/L**
SampType: **ICS**	Run ID: **ICMS2_140513B**	Analysis Date: **5/14/2014 10:45:00 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.000276	0.000300	0.000300	0	92.0	70	130			N
IS: Perchlorate_107	0.00100		0.00100		126	50	150			N

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAC certified

CLIENT: GCAL LAB
Work Order: 1405047
Project: DoD Perchlorate

ANALYTICAL QC SUMMARY REPORT

RunID: ICMS2_140513B

Sample ID **CCV-140514**	Batch ID: **R73097**	TestNo: **SW6860**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICMS2_140513B**	Analysis Date: **5/14/2014 1:13:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.00485	0.000300	0.00500	0	97.0	85	115			N
IS: Perchlorate_107	0.00100		0.00100		117	50	150			N

Sample ID **LCVL2-140514**	Batch ID: **R73097**	TestNo: **SW6860**	Units: **mg/L**
SampType: **LCVL**	Run ID: **ICMS2_140513B**	Analysis Date: **5/14/2014 1:29:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.000176	0.000300	0.000200	0	88.0	70	130			N
IS: Perchlorate_107	0.00100		0.00100		140	50	150			N

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAC certified

Lab Order: 1405047
Client: GCAL LAB
Project: DoD Perchlorate

Sequence Report

Run ID: ICMS2_140513B

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date	Matrix
ICV-140513	-----	SW6860	R73097	1	5/13/2014 10:15:00 AM		A
LCVL-140513	-----	SW6860	R73097	1	5/13/2014 10:31:00 AM		A
ICS-140513	-----	SW6860	R73097	1	5/13/2014 10:47:00 AM		A
CCV1-140513	-----	SW6860	R73097	1	5/13/2014 4:16:00 PM		A
LCVL2-140513	-----	SW6860	R73097	1	5/13/2014 4:36:00 PM		A
MB-63496	-----	SW6860	63496	1	5/13/2014 5:31:00 PM	5/13/2014 1:01:56 PM	A
LCS-63496	-----	SW6860	63496	1	5/13/2014 5:47:00 PM	5/13/2014 1:01:56 PM	A
1404319-01AMS	-----	SW6860	63496	1	5/13/2014 6:19:00 PM	5/13/2014 1:01:56 PM	A
CCV2-140513	-----	SW6860	R73097	1	5/13/2014 9:16:00 PM		A
LCVL3-140513	-----	SW6860	R73097	1	5/13/2014 9:32:00 PM		A
1405047-01A	MWQ-19	SW6860	63496	1	5/13/2014 10:20:00 PM	5/13/2014 1:01:56 PM	A
1405047-02A	MWQ-18	SW6860	63496	1	5/13/2014 10:36:00 PM	5/13/2014 1:01:56 PM	A
1405047-03A	MWQ-21	SW6860	63496	1	5/13/2014 10:52:00 PM	5/13/2014 1:01:56 PM	A
1405047-04A	MWQ-22	SW6860	63496	1	5/13/2014 11:08:00 PM	5/13/2014 1:01:56 PM	A
1405047-05A	MWQ-22-a	SW6860	63496	1	5/13/2014 11:24:00 PM	5/13/2014 1:01:56 PM	A
1405047-06A	MWQ-2	SW6860	63496	1	5/13/2014 11:40:00 PM	5/13/2014 1:01:56 PM	A
1405047-06AMS	MWQ-2MS	SW6860	63496	1	5/13/2014 11:56:00 PM	5/13/2014 1:01:56 PM	A
1405047-06AMSD	MWQ-2MSD	SW6860	63496	1	5/14/2014 12:12:00 AM	5/13/2014 1:01:56 PM	A
1405047-07A	MWQ-14	SW6860	63496	1	5/14/2014 12:29:00 AM	5/13/2014 1:01:56 PM	A
1405047-08A	MWQ-20	SW6860	63496	1	5/14/2014 12:45:00 AM	5/13/2014 1:01:56 PM	A
CCV3-140513	-----	SW6860	R73097	1	5/14/2014 1:01:00 AM		A
LCVL4-140513	-----	SW6860	R73097	1	5/14/2014 1:17:00 AM		A
LRB1-140514	-----	SW6860	R73097	1	5/14/2014 9:57:00 AM		A
ICV-140514	-----	SW6860	R73097	1	5/14/2014 10:13:00 AM		A
LCVL1-140514	-----	SW6860	R73097	1	5/14/2014 10:29:00 AM		A
ICS-140514	-----	SW6860	R73097	1	5/14/2014 10:45:00 AM		A
1405047-06A	MWQ-2	SW6860	63496	1	5/14/2014 12:33:00 PM	5/13/2014 1:01:56 PM	A
1404319-01AMSD	-----	SW6860	63496	1	5/14/2014 12:57:00 PM	5/13/2014 1:01:56 PM	A
CCV-140514	-----	SW6860	R73097	1	5/14/2014 1:13:00 PM		A
LCVL2-140514	-----	SW6860	R73097	1	5/14/2014 1:29:00 PM		A

GCAL
ANALYTICAL LABORATORIES, LLC

NELAP CERTIFICATE NUMBER: 01955
DOD ELAP CERTIFICATE NUMBER: L14-243

ANALYTICAL RESULTS

PERFORMED BY

GCAL, LLC
7979 Innovation Park Dr.
Baton Rouge, LA 70820

Report Date 11/04/2014

GCAL Report 214102402

Deliver To	Trinity A&D 1002 N Eglin Pkwy Shalimar, FL 32579 922-5738
Attn	Jonathan Kramer

Project Melrose AFR

PJLA Testing DoD ELAP

ISO 17025

NELAP ACCREDITED TNI LABORATORY

Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

Common Abbreviations Utilized in this Report

ND	Indicates the result was Not Detected at the specified LOQ
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
MDL	Method Detection Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
00:00	Reported as a time equivalent to 12:00 AM

Reporting Flags Utilized in this Report

J	Indicates the result is between the MDL and LOQ
U	Indicates the compound was analyzed for but not detected
B	Indicates the analyte was detected in the associated Method Blank

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with NELAC, this report shall be reproduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with the NELAC standard and terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Estimated uncertainty of measurement is available upon request. This report is in compliance with the DOD QSM as specified in the contract if applicable.

Authorized Signature
GCAL Report 214102402

Case Narrative

Client: TRINITY Analysis & Development Corp. **Report:** 214102402

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the Report Sample Summary page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

No anomalies were found for the analyzed sample(s).

Sample Test Summary Report: 214102402

Lab Sample ID	Cust. Sample ID	Matrix	Proc. Desc.
21410240201	IDW-01	W	EPA 1010 Flashpoint Water
21410240201	IDW-01	W	SM 4500 H+B/EPA 9040 pH
21410240201	IDW-01	W	Total Hydrocarbons TX1005 Water Prep
21410240201	IDW-01	W	Total Hydrocarbons TX1005 Water

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410240201	IDW-01	Water	10/23/2014 12:35	10/24/2014 09:35

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: IDW-01

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 214102402

Sample wt/vol: 32.4 | Units: mL | Lab Sample ID: 21410240201

Level: (low/med) LOW | Date Collected: 10/23/14 | Time: 1235

% Moisture: | decanted: (Y/N) | Date Received: 10/24/14

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Extracted: 10/27/14

Concentrated Extract Volume: 3000 (µL) | Date Analyzed: 10/29/14 | Time: 0030

Soil Aliquot Volume: (µL) | Dilution Factor: 1 | Analyst: DLB

Injection Volume: 1 (µL) | Prep Method: TX1005 PREP

GPC Cleanup: (Y/N) N | pH: | Analytical Method: TX1005

Prep Batch: 543752 | Analytical Batch: 544257 | Sulfur Cleanup: (Y/N) N | Instrument ID: GCS20A

CONCENTRATION UNITS: ug/L | Lab File ID: 2141028/sv20a021

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
GCSV-05-02	>C12-C28	121	U	121	2310
GCSV-05-03	>C28-C35	121	U	121	2310
GCSV-05-01	C6-C12	104	U	104	1390
GCSV-05-04	TOTAL TPH (C6-C35)	104	U	104	2310

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 32 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: DB-5MS-30M ID: .25 (mm)

Concentrated Extract Volume: 3000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 543752 Analytical Batch: 544257

CONCENTRATION UNITS: ug/L

Sample ID: MB1373973

Contract:

SAS No.: SDG No.: 214102402

Lab Sample ID: 1373973

Date Collected: Time:

Date Received:

Date Extracted: 10/27/14

Date Analyzed: 10/28/14 Time: 2258

Dilution Factor: 1 Analyst: DLB

Prep Method: TX1005 PREP

Analytical Method: TX1005

Sulfur Cleanup: (Y/N) N Instrument ID: GCS20A

Lab File ID: 2141028/sv20a018

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
GCSV-05-01	C6-C12	105	U	105	1410
GCSV-05-02	>C12-C28	123	U	123	2340
GCSV-05-03	>C28-C35	123	U	123	2340
GCSV-05-04	TOTAL TPH (C6-C35)	105	U	105	2340

2E

ORGANIC SURROGATE RECOVERY

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102402

GC Column (1): DB-5MS-30M ID: .25 (mm) GC Cloumn (2): ID: (mm)

Method: TX1005

	EPA SAMPLE NO.	SMC1 1-(1)	Lo	Hi	F	SMC2 2	Lo	Hi	F	SMC3 3	Lo	Hi	F	SMC4 4	Lo	Hi	F	TOT OUT
1.	IDW-01	120	58	148														0
2.	MB1373973	118	58	148														0
3.	LCS1373974	116	58	148														0
4.	LCSD1373975	110	58	148														0

SMC 1 : O-Terphenyl SMC 2 :

SMC 3 : SMC 4 :

Column to be used to flag recovery limits

* Value outside of contract required limits

D Surrogate diluted out

3E

WATER ORGANICS LCS/LCSD RECOVERY

Lab Name: GCAL

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102402

Contract: Method: TX1005

Prep Batch: 543752 Analytical Batch: 544257

SAMPLE NO : 1373974

COMPOUND	*UNITS*	*SPIKE ADDED*	*SAMPLE CONCENTRATION*	*LCS CONCENTRATION*	*LCS % REC*	*LCS % REC FLAG*	*QC. LIMITS*
TOTAL TPH (C6-C35)	ug/L	63700	0	67700	106		75 - 125

SAMPLE NO : 1373975

COMPOUND	*UNITS*	*SPIKE ADDED*	*LCSD CONC.*	*LCSD % REC*	*REC FLAG*	*% RPD*	*RPD FLAG*	*QC. LIMITS REC*	*RPD*
TOTAL TPH (C6-C35)	ug/L	62700	63000	101		7		75 - 125	0 - 20

RPD : 0 out of 1 outside limits

Spike Recovery: 0 out of 2 outside limits

FORM III ORG-1

4C

ORGANIC METHOD BLANK SUMMARY

Lab Name: GCAL | Sample ID: MB1373973

Lab Code: LA024 | Case No.: | Contract:

Lab Sample ID: 1373973 | SAS No.: | SDG No.: 214102402

Matrix: Water | Sulfur Cleanup: (Y/N) N | Date Extracted: 10/27/14

Date Analyzed (1): 10/28/14 | Time (1): 2258 | Date Analyzed (2): | Time (2):

Instrument ID (1): GCS20A | Instrument ID (2):

GC Column (1): DB-5MS-30M | ID: .25 (mm) | GC Column (2): | ID: (mm)

Method: TX1005 | Prep Batch: 543752 | Analytical Batch: 544257

Lab File ID: 2141028/sv20a0

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES

	SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	INSTRUMENT ID
1.	LCS1373974	1373974	10/28/14	2329	GCS20A
2.	LCSD1373975	1373975	10/28/14	2359	GCS20A
3.	IDW-01	21410240201	10/29/14	0030	GCS20A

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 22-OCT-2014 15:40
End Cal Date : 22-OCT-2014 18:15
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /var/chem/gcsv20a.i/2141028.b/TX1005.m
Cal Date : 03-Nov-2014 13:17 dlb
Curve Type : Average

Calibration File Names:
Level 1: /var/chem/gcsv20a.i/2141022p.b/sv20a004d.d
Level 2: /var/chem/gcsv20a.i/2141022p.b/sv20a005d.d
Level 3: /var/chem/gcsv20a.i/2141022p.b/sv20a003d.d
Level 4: /var/chem/gcsv20a.i/2141022p.b/sv20a006d.d
Level 5: /var/chem/gcsv20a.i/2141022p.b/sv20a007d.d
Level 6: /var/chem/gcsv20a.i/2141022p.b/sv20a008d.d

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	200.000 Level 4	500.000 Level 5	1000.000 Level 6	___ RRF	% RSD
1 >C6-C12	23349	21059	21961	16745	14670	17323	19184	17.808
121 >C6-C10	23349	21059	21961	16745	14670	17323	19184	17.808
122 >C10-C28	11127	13439	17883	18834	16008	16267	+++++	0.000
2 >C6-C8	23349	21059	21961	16745	14670	17323	19184	17.808
3 >C8-C10	23349	21059	21961	16745	14670	17323	19184	17.808
4 >C10-C12	23349	21059	21961	16745	14670	17323	19184	17.808
5 >C12-C16	11127	13439	17883	18834	16008	16267	+++++	0.000
6 >C16-C35	11127	13439	17883	18834	16008	16267	+++++	0.000
7 >C16-C21	11127	13439	17883	18834	16008	16267	+++++	0.000
8 >C21-C35	11127	13439	17883	18834	16008	16267	+++++	0.000
9 C-6	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
11 C-8	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 C-10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
15 C-12	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
17 C-14	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
19 C-16	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
21 C-18	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
23 C-20	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
24 C-21	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
25 C-22	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
26 C-23	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 22-OCT-2014 15:40
End Cal Date : 22-OCT-2014 18:15
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /var/chem/gcsv20a.i/2141028.b/TX1005.m
Cal Date : 03-Nov-2014 13:17 dlb
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	200.000 Level 4	500.000 Level 5	1000.000 Level 6	___ RRF	% RSD
27 C-24	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
28 C-25	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
29 C-26	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
30 C-27	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
31 C-28	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
32 C-35	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
33 >C12-C28	11127	13439	17883	18834	16008	16267	15593	18.355
35 >C28-C35	11127	13439	17883	18834	16008	16267	15593	18.355
120 >C6-C35	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
123 C7-C8	23349	21059	21961	16745	14670	17323	19184	17.808
$ 34 O-TERPHENYL	24170	24445	23124	22349	21303	21949	22890	5.458

GCAL, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: 1600
Level: LOW
Data Type: GC MULTI COMP
SpikeList File: c6-12icv.spk
Sublist File: c6-c12.sub
Method File: /var/chem/gcsv20a.i/2141022p.b/TX1005.m
Misc Info:

Client SDG: 2141022p
Fraction: SV

Operator: dlb
SampleType: LCS
Quant Type: ESTD

SPIKE COMPOUND	CONC ADDED UG/L	CONC RECOVERED UG/L	% RECOVERED	LIMITS
1 >C6-C12	100	95.8	95.81	85-115

SURROGATE COMPOUND	CONC ADDED UG/L	CONC RECOVERED UG/L	% RECOVERED	LIMITS
$ 34 O-TERPHENYL	500000	0.00	*	60-140

GCAL, Inc.

RECOVERY REPORT

Client Name:
Client SDG: 2141022p
Sample Matrix: LIQUID
Fraction: SV
Lab Smp Id: 1600
Level: LOW
Operator: dlb
Data Type: GC MULTI COMP
SampleType: LCS
SpikeList File: c12-28icv.spk
Quant Type: ESTD
Sublist File: c12-c35.sub
Method File: /var/chem/gcsv20a.i/2141022p.b/TX1005.m
Misc Info:

SPIKE COMPOUND	CONC ADDED UG/L	CONC RECOVERED UG/L	% RECOVERED	LIMITS
33 >C12-C28	100	107	107.31	85-115

GCAL, Inc.

1005 CALCULATION

Data file : /var/chem/gcsv20a.i/2141028.b/sv20a014d.d
Lab Smp Id: 1400
Inj Date : 28-OCT-2014 20:54
Operator : dlb Inst ID: gcsv20a.i
Smp Info : 1400*1 93-11-11
Misc Info :
Comment :
Method : /var/chem/gcsv20a.i/2141028.b/TX1005.m
Meth Date : 03-Nov-2014 12:31 dlb Quant Type: ESTD
Cal Date : 22-OCT-2014 16:12 Cal File: sv20a004d.d
Als bottle: 14 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: c12-c35.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	35.00000	Volume of sample extracted (mL)
Vt	3000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Uf	1.00000	Correction factor

$$\text{1005 (C12-C28)} = \frac{(\text{Sum of Area}) - (\text{Surr Area}) \times (\text{Final Vol}) \times (\text{Dilution Factor})}{(\text{Response Factor}) \times (\text{Initial Volume})}$$

$$= \frac{(3698335.0 - 2171047) \times 3000.0 \times 1.0}{15593 \times 35.0}$$

$$= 8395.5 \text{ ug/L}$$

Compounds	RF	%Diff
C6-C12	16192.16	-15.6
C12-C28	15272.88	-2.1
C28-C35	13543.19	-13.1
O-TERPHENYL	21710.47	-5.2

GCAL, Inc.

1005 CALCULATION

Data file : /var/chem/gcsv20a.i/2141028.b/sv20a022d.d
Lab Smp Id: 1400
Inj Date : 29-OCT-2014 01:00
Operator : dlb Inst ID: gcsv20a.i
Smp Info : 1400*1 93-11-11
Misc Info :
Comment :
Method : /var/chem/gcsv20a.i/2141028.b/TX1005.m
Meth Date : 03-Nov-2014 12:32 dlb Quant Type: ESTD
Cal Date : 22-OCT-2014 16:12 Cal File: sv20a004d.d
Als bottle: 22 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: c12-c35.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	35.00000	Volume of sample extracted (mL)
Vt	3000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Uf	1.00000	Correction factor

$$\text{1005 (C12-C28)} = \frac{((\text{Sum of Area}) - (\text{Surr Area})) \times (\text{Final Vol}) \times (\text{Dilution Factor})}{(\text{Response Factor}) \times (\text{Initial Volume})}$$

$$= \frac{(3558278.0 - 2236138) \times 3000.0 \times 1.0}{15593 \times 35.0}$$

$$= 7267.8 \quad \text{ug/L}$$

Compounds	RF	%Diff
C6-C12	17072.97	-11.0
C12-C28	13221.4	-15.2
C28-C35	13221.4	-15.2
O-TERPHENYL	22361.38	-2.3

1005 SAMPLE PREPARATION FORM

EXTRACTION DATE/TIME: 10/27/14	Start: 13:11 End: 16:41	BATCH NO:	543752
MATRIX:	WATER ☑ SOIL ☐ OTHER ☐	LEVEL:	LOW ☑ MEDIUM ☐

	CLIENT	CLIENT ID	GCAL ID	INITIAL VOL/WT mL g	FINAL VOLUME (mL)	Init pH	SAMPLE TYPE	COMMENTS	METHOD
1	QC ACCOUNT	MB for HBN 543752 [EXTO/40763]	1373973	32	3.0		MB		SHAKER ✓
2	QC ACCOUNT	LCS for HBN 543752 [EXTO/40763	1373974	31.4	3.0		LCS		
3	QC ACCOUNT	LCSD for HBN 543752 [EXTO/4076	1373975	31.9	3.0		LCSD		SEPARATORY FUNNEL/3510
4	4747	IDW-01	21410240201	32.4	3.0		SAMPLE		
5									SOXHLET/3540
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									Sodium Sulfate:
23									
24									Methanol:
25									
26									
27									Pentane Lot No: 131785
28									

OMMENTS: SAMPLE PREPARATION INCLUDE DETERMINATION OF SAMPLE VOLUME/WEIGHT, SOLVENT EXTRACTION AND EVAPORATION OF
OLVENT TO FINAL VOLUME.

BALANCE ID: M33557 TEMP: _____

SURROGATE ID	583-22-17	DIESEL SPIKE ID	583-22-18	GAS SPIKE ID		TECHNICIAN	DATE
VOLUME	100ul	VOLUME	100ul	VOLUME		Erin Byrne	10/27/14
CONCENTRATION	5000ug/L	CONCENTRATION	10,000ug/L	CONCENTRATION			
						SUPERVISOR	DATE
SPIKE WITNESS	OA					TES	10/31/14

evision 3, 10/04/2010

LABORATORY CHRONICLE: GCSV DEPARTMENT

Date: 10/30/2014
Instrument: gcsv20a.i
Method File: /var/chem/gcsv20a.i/2141022p.b/TX1005.m
Batch: /var/chem/gcsv20a.i/2141022p.b
Column-Detector: DB-5MS-30M

Sample ID	Standard ID	DataFile	Wgt/Vol	Injection Time	Dil	Anal	ALS	Comments
cm		sv20a001.d	35.00 ml	22-OCT-2014 14:38	1.000	dlb	1	lacm
pent lot #1235		sv20a002.d	35.00 ml	22-OCT-2014 15:09	1.000	dlb	2	c6-c12
1203		sv20a003.d	35.00 ml	22-OCT-2014 15:40	1.000	dlb	3	c6-c12
1203		sv20a003d.d	35.00 ml	22-OCT-2014 15:40	1.000	dlb	3	c12-c35
1201		sv20a004.d	35.00 ml	22-OCT-2014 16:12	1.000	dlb	4	c6-c12
1201		sv20a004d.d	35.00 ml	22-OCT-2014 16:12	1.000	dlb	4	c12-c35
1202		sv20a005.d	35.00 ml	22-OCT-2014 16:43	1.000	dlb	5	c6-c12
1202		sv20a005d.d	35.00 ml	22-OCT-2014 16:43	1.000	dlb	5	c12-c35
1204		sv20a006.d	35.00 ml	22-OCT-2014 17:14	1.000	dlb	6	c6-c12
1204		sv20a006d.d	35.00 ml	22-OCT-2014 17:14	1.000	dlb	6	c12-c35
1205		sv20a007.d	35.00 ml	22-OCT-2014 17:45	1.000	dlb	7	c6-c12
1205		sv20a007d.d	35.00 ml	22-OCT-2014 17:45	1.000	dlb	7	c12-c35
1206		sv20a008.d	35.00 ml	22-OCT-2014 18:15	1.000	dlb	8	c6-c12
1206		sv20a008d.d	35.00 ml	22-OCT-2014 18:15	1.000	dlb	8	c12-c35
1600		sv20a009.d	1.00 ml	22-OCT-2014 18:46	1.000	dlb	9	c6-c12
1600		sv20a009d.d	1.00 ml	22-OCT-2014 18:46	1.000	dlb	9	c12-c35
1371577		sv20a010.d	31.50 ml	22-OCT-2014 19:17	1.000	dlb	10	1006AR
1371578		sv20a011.d	32.00 ml	22-OCT-2014 19:47	1.000	dlb	11	c6-c12
1371578		sv20a011d.d	32.00 ml	22-OCT-2014 19:47	1.000	dlb	11	c12-c35
1371578		sv20a011s.d	32.00 ml	22-OCT-2014 19:47	1.000	dlb	11	1006AR
1371579		sv20a012.d	31.50 ml	22-OCT-2014 20:18	1.000	dlb	12	c6-c12
1371579		sv20a012d.d	31.50 ml	22-OCT-2014 20:18	1.000	dlb	12	c12-c35
1371579		sv20a012s.d	31.50 ml	22-OCT-2014 20:18	1.000	dlb	12	1006AR
1400		sv20a013.d	35.00 ml	22-OCT-2014 20:49	1.000	dlb	13	c6-c12
1400		sv20a013d.d	35.00 ml	22-OCT-2014 20:49	1.000	dlb	13	c12-c35
21410175201		sv20a014.d	31.60 ml	22-OCT-2014 21:19	1.000	dlb	14	1006AR
21410175202		sv20a015.d	31.70 ml	22-OCT-2014 21:50	1.000	dlb	15	1006AR
21410175203		sv20a016.d	32.80 ml	22-OCT-2014 22:20	1.000	dlb	16	1006AR
21410175204		sv20a017.d	31.90 ml	22-OCT-2014 22:51	1.000	dlb	17	1006AR
21410175205		sv20a018.d	32.20 ml	22-OCT-2014 23:22	1.000	dlb	18	1006AR
21410175206		sv20a019.d	31.90 ml	22-OCT-2014 23:53	1.000	dlb	19	1006AR
21410175207		sv20a020.d	31.40 ml	23-OCT-2014 00:24	1.000	dlb	20	1006AR
21410175208		sv20a021.d	32.60 ml	23-OCT-2014 00:55	1.000	dlb	21	1006AR
21410175209		sv20a022.d	31.70 ml	23-OCT-2014 01:26	1.000	dlb	22	1006AR
21410175210		sv20a023.d	32.00 ml	23-OCT-2014 01:56	1.000	dlb	23	1006AR
1400		sv20a024.d	35.00 ml	23-OCT-2014 02:27	1.000	dlb	24	c6-c12

LABORATORY CHRONICLE: GCSV DEPARTMENT

Date: 10/30/2014
Instrument: gcsv20a.i
Method File: /var/chem/gcsv20a.i/2141022p.b/TX1005.m
Batch: /var/chem/gcsv20a.i/2141022p.b
Column-Detector: DB-5MS-30M

Sample ID	Standard ID	DataFile	Wgt/Vol	Injection Time	Dil	Anal	ALS	Comments
1400		sv20a024d.d	35.00 ml	23-OCT-2014 02:27	1.000	dlb	24	c12-c35
21410175211		sv20a025.d	32.50 ml	23-OCT-2014 02:57	1.000	dlb	25	1006AR
21410175212		sv20a026.d	31.10 ml	23-OCT-2014 03:27	1.000	dlb	26	1006AR
21410175213		sv20a027.d	32.40 ml	23-OCT-2014 03:57	1.000	dlb	27	1006AR
21410175214		sv20a028.d	32.10 ml	23-OCT-2014 04:28	1.000	dlb	28	1006AR
21410175215		sv20a029.d	32.30 ml	23-OCT-2014 04:58	1.000	dlb	29	1006AR
21410175216		sv20a030.d	32.30 ml	23-OCT-2014 05:28	1.000	dlb	30	1006AR
21410175217		sv20a031.d	31.20 ml	23-OCT-2014 05:58	1.000	dlb	31	1006AR
21410175218		sv20a032.d	32.10 ml	23-OCT-2014 06:28	1.000	dlb	32	1006AR
1400		sv20a033.d	35.00 ml	23-OCT-2014 06:59	1.000	dlb	33	c6-c12
1400		sv20a033d.d	35.00 ml	23-OCT-2014 06:59	1.000	dlb	33	c12-c35

LABORATORY CHRONICLE: GCSV DEPARTMENT

Date: 11/03/2014
Instrument: gcsv20a.i
Method File: /var/chem/gcsv20a.i/2141028.b/TX1005.m
Batch: /var/chem/gcsv20a.i/2141028.b
Column-Detector: DB-5MS-30M

Sample ID	Standard ID	DataFile	Wgt/Vol	Injection Time	Dil	Anal	ALS	Comments
cm		sv20a001.d	35.00 ml	28-OCT-2014 10:57	1.000	dlb	1	lacm
pent lot #1235		sv20a002.d	35.00 ml	28-OCT-2014 11:28	1.000	dlb	2	c6-c12
1400		sv20a003.d	35.00 ml	28-OCT-2014 14:54	1.000	dlb	3	c6-c12
1400		sv20a003d.d	35.00 ml	28-OCT-2014 14:54	1.000	dlb	3	c12-c35
1400		sv20a014.d	35.00 ml	28-OCT-2014 20:54	1.000	dlb	14	c6-c12
1400		sv20a014d.d	35.00 ml	28-OCT-2014 20:54	1.000	dlb	14	c12-c35
1373973		sv20a018.d	32.00 ml	28-OCT-2014 22:58	1.000	dlb	18	c6-c12
1373974		sv20a019.d	31.40 ml	28-OCT-2014 23:29	1.000	dlb	19	c6-c12
1373974		sv20a019d.d	31.40 ml	28-OCT-2014 23:29	1.000	dlb	19	c12-c35
1373975		sv20a020.d	31.90 ml	28-OCT-2014 23:59	1.000	dlb	20	c6-c12
1373975		sv20a020d.d	31.90 ml	28-OCT-2014 23:59	1.000	dlb	20	c12-c35
21410240201		sv20a021.d	32.40 ml	29-OCT-2014 00:30	1.000	dlb	21	c6-c12
1400		sv20a022.d	35.00 ml	29-OCT-2014 01:00	1.000	dlb	22	c6-c12
1400		sv20a022d.d	35.00 ml	29-OCT-2014 01:00	1.000	dlb	22	c12-c35

Sample Results

IDW-01	**Collect Date**	10/23/2014 12:35	**GCAL ID**	21410240201
	Receive Date	10/24/2014 09:35	**Matrix**	Water

EPA 1010A

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/03/2014 15:15	KLC2	544279

CAS#	Parameter	Result	MDL	LOQ	Units
000000-01-3	FlashPoint	>170	50	50	Deg F

SM 4500-H+ B/EPA 9040C

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/24/2014 12:17	DNM	543699

CAS#	Parameter	Result	MDL	LOQ	Units
pH	pH	7.71	1.00	1.00	pH unit

General Chemistry Quality Control Summary

Analytical Batch 544279	Client ID	LCS544279			
	GCAL ID	1376603			
	Sample Type	LCS			
	Prep Date	NA			
	Analysis Date	11/03/2014 13:35			
	Matrix	Water			
EPA 1010A		Spike Added	Result	%R	Control Limits %R
FlashPoint	000000-01-3	90	89	99	97.8 - 102.2

Analytical Batch 543699	Client ID	IDW-01		1373546DUP		
	GCAL ID	21410240201		1373546		
	Sample Type	SAMPLE		DUP		
	Prep Date	NA		NA		
	Analysis Date	10/24/2014 12:17		10/24/2014 12:17		
	Matrix	Water		Water		
SM 4500-H+ B/EPA 9040C		Units Result	pH unit MDL	Result	RPD	RPD Limit
pH	pH	7.71	1.00	7.72	0	6

TRINITY ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Page 1 of 1

Project Number: A012-109

Chain of Custody Number (1): MAFR20141023-1

Quote Number:

Project Name / Site Name: Melrose AFR

Facility:

Client Name: Trinity (850) 613-6800

Project Manager: Jonathan Kramer

Collected by: Ben Stewart

Turn Around Time: 24 Hour / 5 Day / Standard X / Other

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (mm-dd-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	pH	Flashpoint TX-1005	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
DW-01		10232014	1235		N	1	WG	4	X	X			01	B

Sample Analysis Requested (5) / Quality Assurance Samples (6)

Client ID: 4747 - TRINITY Analysis & Development Corp.
SDG: 214102402
Due Date: 10/31/14

Comments

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time		Received by (signed)	Date	Time
1.	[signature]	10-23-14	1630	1.			
2.	FedEx	10/24/14	0935	2.	Allison Nag [signature]	10/24/14	0935
3.				3.			

Sample Delivery Details / Laboratory Receipt 2.4 E24

Delivered Directly to Lab: No

Method of Shipment: FedEx

Analytical Lab: GCAL

Lab Recipient:

Shipped: No.:

Airbill Number: 5980 7379 8969

Delivery Location: Baton Rouge, LA

Delivery Date/Time:

214102402

1.) Chain of Custody Number = site name (e.g., 125) and then date (yymmdd) collected + custody number (e.g. 125-140720-01)...July 20, 2014. (13 Characters Max)

2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-01 on 07/20/14 = 01, if sampled again on 07/20/14 = 02, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Ground Water , WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS= Suface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ= Soil Blanks

5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

6.) Quality assurance samples are assigned by date (ddmmyy) and the number of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or ambient blank collected on July 20, 2014 in association with samples on the COC will be designated 20071401 in the Blank Lot Control Number field).

7.) Trip Blanks shall correspond to the first well sampled with VOCs, for example: SS125-MW-03-c

GCAL ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIVING CHECKLIST

214102402

SAMPLE DELIVERY GROUP 214102402	
Client 4747 - TRINITY Analysis & Development Corp.	**Transport Method** FEDEX
Profile Number 195817	**Received By** Naquin, Allison
Line Item(s) 1 - Waters	**Receive Date(s)** 10/24/14

CHECKLIST	YES	NO	NA
Were all samples received using proper thermal preservation?	☑	☐	☐
When used, were all custody seals intact?	☑	☐	☐
Were all samples received in proper containers?	☑	☐	☐
Were all samples received using proper chemical preservation?	☑	☐	☐
Was preservative added to any container at the lab?	☐	☑	☐
Were all containers received in good condition?	☑	☐	☐
Were all VOA vials received with no head space?	☑	☐	☐
Do all sample labels match the Chain of Custody?	☑	☐	☐
Did the Chain of Custody list the sampling technician?	☑	☐	☐
Was the COC maintained i.e. all signatures, dates and time of receipt included?	☐	☑	☐

COOLERS

Airbill	Thermometer ID: E24	Temp(°C)
5980 9379 8969		2.4

DISCREPANCIES

None

LAB PRESERVATIONS

None

NOTES

214102402 24

Southeast ACCUTEST LABORATORIES

11/07/14

Technical Report for

Trinity Analysis & Development Corp

Melrose Air Force Range, NM

A012-109

Accutest Job Number: FA19379

Sampling Date: 10/23/14

Report to:

Trinity Analysis & Development Corp
1002 N Eglin Pkwy
Shalimar, FL 32579
jkramer@trinityadc.com; jbrown@trinityadc.com

ATTN: Jonathan Kramer

Total number of pages in report: **140**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Norm Farmer
Technical Director

Client Service contact: Jean Dent-Smith 407-425-6700

Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001) DoD ELAP (L-A-B L2229), CA (2937), TX (T104704404), PA (68-03573), VA (460177), AK, AR, GA, KY, MA, NV, OK, UT, WA

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories. Test results relate only to samples analyzed.

Accutest Laboratories is the sole authority for authorizing edits or modifications to this document. Unauthorized modification of this report is strictly prohibited.

Table of Contents

Sections: 1 2 3 4 5 6 7 8 9 10 11 12

Section 1: Sample Summary **4**

Section 2: Case Narrative/Conformance Summary **5**

Section 3: Summary of Hits **9**

Section 4: Sample Results **10**

4.1: FA19379-1: MA02MW001D 11

4.2: FA19379-1F: MA02MW001D 17

4.3: FA19379-2: TB-1 18

Section 5: Misc. Forms **20**

5.1: Chain of Custody 21

Section 6: GC/MS Volatiles - QC Data Summaries **24**

6.1: Method Blank Summary 25

6.2: Blank Spike Summary 27

6.3: Matrix Spike/Matrix Spike Duplicate Summary 29

6.4: Instrument Performance Checks (BFB) 31

6.5: Internal Standard Area Summaries 33

6.6: Surrogate Recovery Summaries 34

6.7: Initial and Continuing Calibration Summaries 35

Section 7: GC/MS Semi-volatiles - QC Data Summaries **45**

7.1: Method Blank Summary 46

7.2: Blank Spike Summary 47

7.3: Matrix Spike/Matrix Spike Duplicate Summary 48

7.4: Internal Standard Area Summaries 49

7.5: Initial and Continuing Calibration Summaries 51

Section 8: GC Semi-volatiles - QC Data Summaries **56**

8.1: Method Blank Summary 57

8.2: Blank Spike Summary 59

8.3: Matrix Spike/Matrix Spike Duplicate Summary 60

8.4: Surrogate Recovery Summaries 61

8.5: GC Surrogate Retention Time Summaries 62

8.6: Initial and Continuing Calibration Summaries 65

Section 9: Metals Analysis - QC Data Summaries **85**

9.1: Inst QC MA12005: Hg 86

9.2: Prep QC MP28146: Hg 96

Section 10: General Chemistry - QC Data Summaries **101**

10.1: Method Blank and Spike Results Summary 102

10.2: Duplicate Results Summary 103

10.3: Matrix Spike Results Summary 104

10.4: Matrix Spike Duplicate Results Summary 105

10.5: Inst QC GN63845: Chloride,Nitrogen, Nitrate,Nitrogen, Nitrite,Sulfate 106

10.6: Inst QC GN63981: Cyanide, Total 109

Section 11: Misc. Forms (Accutest New Jersey) **111**

11.1: Chain of Custody 112

Table of Contents

Section 12: Metals Analysis - QC Data (Accutest New Jersey) 114

12.1: Inst QC MA35341: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag, Na,Tl,V,Zn 115

12.2: Prep QC MP82918: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag, Na,Tl,V,Zn 135

Accutest Laboratories

Sample Summary

Trinity Analysis & Development Corp

Job No: FA19379

Melrose Air Force Range, NM
Project No: A012-109

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA19379-1	10/23/14	11:43	BSJK	10/24/14	AQ	Ground Water	MA02MW001D
FA19379-1F	10/23/14	11:43	BSJK	10/24/14	AQ	Groundwater Filtered	MA02MW001D
FA19379-2	10/23/14	11:43	BSJK	10/24/14	AQ	Trip Blank Water	TB-1

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Trinity Analysis & Development Corp **Job No:** FA19379

Site: Melrose Air Force Range, NM **Report Date:** 11/7/2014 1:02:18 PM

1 Sample(s) and 1 Trip Blank were collected on 10/23/2014 and were received at Accutest SE on 10/24/2014 properly preserved, at 2.8 Deg. C and intact. These Samples received an Accutest job number of FA19379. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ **Batch ID:** VO999

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA19369-1MS, FA19369-1MSD were used as the QC samples indicated.

Matrix Spike Duplicate Recovery(s) for Benzene, Bromoform, Carbon tetrachloride, cis-1,3-Dichloropropene, Dibromochloromethane, Ethylbenzene, Styrene, Tetrachloroethylene, Toluene, trans-1,3-Dichloropropene, Xylene (total) are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

RPD(s) for MSD for 1,1,1-Trichloroethane, 1,1,2,2-Tetrachloroethane, 1,1,2-Trichloroethane, 1,1-Dichloroethane, 1,1-Dichloroethylene, 1,2-Dichloroethane, 1,2-Dichloropropane, 2-Hexanone, 4-Methyl-2-pentanone, Benzene, Bromodichloromethane, Bromoform, Carbon disulfide, Carbon tetrachloride, Chlorobenzene, Chloroethane, Chloroform, cis-1,2-Dichloroethylene, cis-1,3-Dichloropropene, Dibromochloromethane, Ethylbenzene, Methyl bromide, Methyl chloride, Methyl ethyl ketone, Methylene chloride, Styrene, Tetrachloroethylene, Toluene, trans-1,2-Dichloroethylene, trans-1,3-Dichloropropene, Trichloroethylene, Vinyl chloride, Xylene (total) are outside control limits for sample FA19369-1MSD. Probable cause is due to sample non-homogeneity.

Extractables by GCMS By Method SW846 6850

Matrix: AQ **Batch ID:** OP53670

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) MC34386-4FMS, MC34386-4FMSD were used as the QC samples indicated.

Extractables by GC By Method SW846 8330A

Matrix: AQ **Batch ID:** OP53732

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA19513-1MS, FA19513-1MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for 1,3,5-Trinitrobenzene, 1,3-Dinitrobenzene, 2,4,6-Trinitrotoluene, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-amino-4,6-Dinitrotoluene, 4-amino-2,6-Dinitrotoluene, m-Nitrotoluene, Nitrobenzene, o-Nitrotoluene, p-Nitrotoluene are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

RPD(s) for MSD for 1,3,5-Trinitrobenzene, 1,3-Dinitrobenzene, 2,4,6-Trinitrotoluene, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-amino-4,6-Dinitrotoluene, 4-amino-2,6-Dinitrotoluene, HMX, m-Nitrotoluene, Nitrobenzene, o-Nitrotoluene, p-Nitrotoluene, RDX, Tetryl are outside control limits for sample OP53732-MSD. Probable cause is due to sample non-homogeneity.

Metals By Method SW846 6020A

Matrix: AQ **Batch ID:** N: MP82918

FA19379-1 for Nickel: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1 for Aluminum: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1 for Antimony: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1 for Arsenic: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1 for Barium: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1 for Beryllium: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1 for Chromium: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1 for Cobalt: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1 for Copper: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1 for Iron: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1 for Cadmium: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1 for Calcium: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1 for Magnesium: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1 for Silver: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1 for Potassium: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1 for Lead: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1 for Sodium: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1 for Vanadium: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1 for Zinc: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1 for Thallium: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1 for Manganese: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1 for Selenium: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1F for Sodium: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1F for Potassium: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1F for Calcium: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1F for Magnesium: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1F for Zinc: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1F for Vanadium: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1F for Thallium: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1F for Selenium: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1F for Nickel: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1F for Manganese: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1F for Lead: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1F for Arsenic: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1F for Silver: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1F for Iron: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1F for Antimony: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1F for Barium: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1F for Beryllium: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1F for Cadmium: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1F for Chromium: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1F for Cobalt: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1F for Copper: Analysis performed at Accutest Laboratories, Dayton, NJ.
FA19379-1F for Aluminum: Analysis performed at Accutest Laboratories, Dayton, NJ.

Metals By Method SW846 7470A

Matrix: AQ **Batch ID:** MP28146

All samples were digested within the recommended method holding time.
All samples were analyzed within the recommended method holding time.
All method blanks for this batch meet method specific criteria.
Sample(s) FA19469-1DUP, FA19469-1MS, FA19469-1MSD, FA19469-1SDL were used as the QC samples for metals.

Wet Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ **Batch ID:** GP24875

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA19378-6MSD, FA19378-6MS were used as the QC samples for Nitrogen, Nitrate and Sulfate.

Matrix Spike Recovery(s) for Nitrogen, Nitrate and Sulfate are outside control limits. Spike recovery indicates possible matrix interference. For method performance in a clean matrix, refer to Blank Spike.

FA19379-1 for Nitrogen, Nitrite: Dilution required due to matrix interference.

FA19379-1 for Nitrogen, Nitrate: Dilution required due to matrix interference.

Wet Chemistry By Method EPA 335.4/SW 9012B

Matrix: AQ **Batch ID:** GP24932

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA19379-1DUP, FA19379-1MS, FA19379-1MSD were used as the QC samples for Cyanide, Total.

FA19379-1 for Cyanide, Total: Confirmed by reanalysis for hit above MDL.

Wet Chemistry By Method SM2320 B-11

Matrix: AQ **Batch ID:** GN63916

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA19506-2DUP were used as the QC samples for Alkalinity, Total as CaCO3.

Wet Chemistry By Method SM2540 C-11

Matrix: AQ **Batch ID:** GN63848

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA19421-1DUP were used as the QC samples for Solids, Total Dissolved.

Wet Chemistry By Method SW846 7196A

Matrix: AQ **Batch ID:** GN63806

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA19379-1MSD, FA19379-1MS were used as the QC samples for Chromium, Hexavalent.

GN63806-S1 for Chromium, Hexavalent: Spike recovery indicates possible matrix interference.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

_____

Kim Benham, Client Services (signature on file)

Date: November 7, 2014

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Accutest Laboratories Southeast, Inc.	**Job No**	FA19379
Site:	BBAFLFWB: Melrose Air Force Range, NM	**Report Date**	11/7/2014 12:00:01 P

On 10/28/2014, 1 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at Accutest Laboratories at a temperature of 4.5 C. Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of FA19379 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Metals By Method SW846 6020A

Matrix: AQ **Batch ID:** MP82918

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) C36707-1FMS, C36707-1FMSD, C36707-1FPS, C36707-1FSDL, FA19379-1FBSP, FA19379-1FMB were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Antimony, Arsenic, Beryllium, Copper, Lead, Selenium, Silver, Thallium are outside control limits for sample MP82918-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- MP82918-PS1 for Manganese: Spike amount low relative to the sample result.
- MP82918-PS1 for Sodium: Spike amount low relative to the sample result.
- MP82918-PS1 for Magnesium: Spike amount low relative to the sample result.
- MP82918-SD1 for Chromium: Serial dilution indicates possible matrix interference.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

Summary of Hits

Job Number: FA19379
Account: Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM
Collected: 10/23/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA19379-1	**MA02MW001D**					
Vinyl chloride		0.53 J	1.0	0.33	ug/l	SW846 8260B
Perchlorate		18.0	0.20	0.040	ug/l	SW846 6850
Barium [a]		7.6	2.0		ug/l	SW846 6020A
Calcium [a]		133000	6300		ug/l	SW846 6020A
Magnesium [a]		56400	2500		ug/l	SW846 6020A
Manganese [a]		184	4.0		ug/l	SW846 6020A
Potassium [a]		7010	500		ug/l	SW846 6020A
Selenium [a]		37.9	2.0		ug/l	SW846 6020A
Sodium [a]		2210000	63000		ug/l	SW846 6020A
Vanadium [a]		5.6	3.0		ug/l	SW846 6020A
Alkalinity, Total as CaCO3		136	5.0		mg/l	SM2320 B-11
Chloride		2030	200		mg/l	EPA 300/SW846 9056A
Solids, Total Dissolved		6540	1000		mg/l	SM2540 C-11
Sulfate		1940	200		mg/l	EPA 300/SW846 9056A
FA19379-1F	**MA02MW001D**					
Barium [a]		8.1	2.0		ug/l	SW846 6020A
Calcium [a]		128000	6300		ug/l	SW846 6020A
Magnesium [a]		53600	2500		ug/l	SW846 6020A
Manganese [a]		180	4.0		ug/l	SW846 6020A
Potassium [a]		6740	500		ug/l	SW846 6020A
Selenium [a]		40.4	2.0		ug/l	SW846 6020A
Sodium [a]		1940000	63000		ug/l	SW846 6020A
Vanadium [a]		5.2	3.0		ug/l	SW846 6020A
FA19379-2	**TB-1**					

No hits reported in this sample.

(a) Analysis performed at Accutest Laboratories, Dayton, NJ.

Southeast ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MA02MW001D		
Lab Sample ID:	FA19379-1	**Date Sampled:**	10/23/14
Matrix:	AQ - Ground Water	**Date Received:**	10/24/14
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Melrose Air Force Range, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O25961.D	1	11/03/14	TD	n/a	n/a	VO999
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	11	ug/l	
71-43-2	Benzene	ND	1.0	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.26	ug/l	
75-25-2	Bromoform	ND	1.0	0.38	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.24	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.20	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.40	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.25	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.24	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.36	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.34	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.28	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.54	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.53	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	1.5	ug/l	
100-42-5	Styrene	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.34	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.27	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.26	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MA02MW001D		
Lab Sample ID:	FA19379-1	**Date Sampled:**	10/23/14
Matrix:	AQ - Ground Water	**Date Received:**	10/24/14
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Melrose Air Force Range, NM		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	0.53	1.0	0.33	ug/l	J
1330-20-7	Xylene (total)	ND	3.0	0.66	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		83-118%
17060-07-0	1,2-Dichloroethane-D4	103%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	104%		83-118%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MA02MW001D
Lab Sample ID: FA19379-1
Matrix: AQ - Ground Water
Method: SW846 6850 SW846 6850
Project: Melrose Air Force Range, NM

Date Sampled: 10/23/14
Date Received: 10/24/14
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q7792.D	1	10/27/14	NAF	10/27/14	OP53670	SQ261
Run #2							

	Initial Volume	Final Volume
Run #1	10.0 ml	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
14797-73-0	Perchlorate	18.0	0.20	0.040	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MA02MW001D
Lab Sample ID: FA19379-1
Matrix: AQ - Ground Water
Method: SW846 8330A SW846 3535A
Project: Melrose Air Force Range, NM

Date Sampled: 10/23/14
Date Received: 10/24/14
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB044376.D	1	10/30/14	KL	10/30/14	OP53732	GBB1191
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	0.19	0.077	ug/l	
121-82-4	RDX	ND	0.19	0.081	ug/l	
99-65-0	1,3-Dinitrobenzene	ND	0.19	0.077	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.19	0.077	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.19	0.082	ug/l	
35572-78-2	2-amino-4,6-Dinitrotoluene	ND	0.19	0.077	ug/l	
19406-51-0	4-amino-2,6-Dinitrotoluene	ND	0.19	0.095	ug/l	
98-95-3	Nitrobenzene	ND	0.19	0.078	ug/l	
88-72-2	o-Nitrotoluene	ND	0.19	0.086	ug/l	
99-08-1	m-Nitrotoluene	ND	0.19	0.077	ug/l	
99-99-0	p-Nitrotoluene	ND	0.19	0.077	ug/l	
479-45-8	Tetryl	ND	0.19	0.077	ug/l	
99-35-4	1,3,5-Trinitrobenzene	ND	0.19	0.077	ug/l	
118-96-7	2,4,6-Trinitrotoluene	ND	0.19	0.077	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	112%		70-136%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MA02MW001D
Lab Sample ID: FA19379-1
Matrix: AQ - Ground Water
Project: Melrose Air Force Range, NM

Date Sampled: 10/23/14
Date Received: 10/24/14
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum [a]	< 50	50	ug/l	2	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Antimony [a]	< 4.0	4.0	ug/l	2	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Arsenic [a]	< 3.0	3.0	ug/l	2	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Barium [a]	7.6	2.0	ug/l	2	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Beryllium [a]	< 1.0	1.0	ug/l	2	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Cadmium [a]	< 6.0	6.0	ug/l	2	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Calcium [a]	133000	6300	ug/l	25	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Chromium [a]	< 8.0	8.0	ug/l	2	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Cobalt [a]	< 1.0	1.0	ug/l	2	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Copper [a]	< 8.0	8.0	ug/l	2	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Iron [a]	< 50	50	ug/l	2	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Lead [a]	< 3.0	3.0	ug/l	2	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Magnesium [a]	56400	2500	ug/l	10	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Manganese [a]	184	4.0	ug/l	2	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Mercury	< 0.50	0.50	ug/l	1	10/31/14	10/31/14	JL	SW846 7470A [1]	SW846 7470A [3]
Nickel [a]	< 8.0	8.0	ug/l	2	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Potassium [a]	7010	500	ug/l	2	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Selenium [a]	37.9	2.0	ug/l	2	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Silver [a]	< 2.0	2.0	ug/l	2	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Sodium [a]	2210000	63000	ug/l	250	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Thallium [a]	< 2.0	2.0	ug/l	2	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Vanadium [a]	5.6	3.0	ug/l	2	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Zinc [a]	< 12	12	ug/l	2	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]

(1) Instrument QC Batch: MA12005
(2) Instrument QC Batch: N:MA35341
(3) Prep QC Batch: MP28146
(4) Prep QC Batch: N:MP82918

(a) Analysis performed at Accutest Laboratories, Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID: MA02MW001D
Lab Sample ID: FA19379-1
Matrix: AQ - Ground Water
Project: Melrose Air Force Range, NM

Date Sampled: 10/23/14
Date Received: 10/24/14
Percent Solids: n/a

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	136	5.0	mg/l	1	10/31/14 10:50	LE	SM2320 B-11
Chloride	2030	200	mg/l	100	10/24/14 20:15	VK	EPA 300/SW846 9056A
Chromium, Hexavalent	< 0.010	0.010	mg/l	1	10/24/14 11:40	LE	SW846 7196A
Cyanide, Total [a]	< 0.010	0.010	mg/l	1	11/05/14 14:33	DM	EPA 335.4/SW 9012B
Nitrogen, Nitrate [b]	< 10	10	mg/l	100	10/24/14 20:15	VK	EPA 300/SW846 9056A
Nitrogen, Nitrite [b]	< 10	10	mg/l	100	10/24/14 20:15	VK	EPA 300/SW846 9056A
Solids, Total Dissolved	6540	1000	mg/l	10	10/27/14 14:45	KC	SM2540 C-11
Sulfate	1940	200	mg/l	100	10/24/14 20:15	VK	EPA 300/SW846 9056A

(a) Confirmed by reanalysis.
(b) Dilution required due to matrix interference.

RL = Reporting Limit

Report of Analysis

Client Sample ID: MA02MW001D
Lab Sample ID: FA19379-1F
Matrix: AQ - Groundwater Filtered
Project: Melrose Air Force Range, NM

Date Sampled: 10/23/14
Date Received: 10/24/14
Percent Solids: n/a

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum [a]	< 50	50	ug/l	2	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Antimony [a]	< 4.0	4.0	ug/l	2	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Arsenic [a]	< 3.0	3.0	ug/l	2	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Barium [a]	8.1	2.0	ug/l	2	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Beryllium [a]	< 1.0	1.0	ug/l	2	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Cadmium [a]	< 6.0	6.0	ug/l	2	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Calcium [a]	128000	6300	ug/l	25	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Chromium [a]	< 8.0	8.0	ug/l	2	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Cobalt [a]	< 1.0	1.0	ug/l	2	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Copper [a]	< 8.0	8.0	ug/l	2	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Iron [a]	< 50	50	ug/l	2	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Lead [a]	< 3.0	3.0	ug/l	2	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Magnesium [a]	53600	2500	ug/l	10	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Manganese [a]	180	4.0	ug/l	2	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Mercury	< 0.50	0.50	ug/l	1	10/31/14	10/31/14	JL	SW846 7470A [1]	SW846 7470A [3]
Nickel [a]	< 8.0	8.0	ug/l	2	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Potassium [a]	6740	500	ug/l	2	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Selenium [a]	40.4	2.0	ug/l	2	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Silver [a]	< 2.0	2.0	ug/l	2	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Sodium [a]	1940000	63000	ug/l	250	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Thallium [a]	< 2.0	2.0	ug/l	2	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Vanadium [a]	5.2	3.0	ug/l	2	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]
Zinc [a]	< 12	12	ug/l	2	10/31/14	11/06/14	ANJ	SW846 6020A [2]	SW846 3010A [4]

(1) Instrument QC Batch: MA12005
(2) Instrument QC Batch: N:MA35341
(3) Prep QC Batch: MP28146
(4) Prep QC Batch: N:MP82918

(a) Analysis performed at Accutest Laboratories, Dayton, NJ.

RL = Reporting Limit

Report of Analysis

Client Sample ID: TB-1
Lab Sample ID: FA19379-2
Matrix: AQ - Trip Blank Water
Method: SW846 8260B
Project: Melrose Air Force Range, NM

Date Sampled: 10/23/14
Date Received: 10/24/14
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O25957.D	1	11/03/14	TD	n/a	n/a	VO999
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	11	ug/l	
71-43-2	Benzene	ND	1.0	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.26	ug/l	
75-25-2	Bromoform	ND	1.0	0.38	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.24	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.20	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.40	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.25	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.24	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.36	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.34	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.28	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.54	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.53	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	1.5	ug/l	
100-42-5	Styrene	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.34	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.27	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.26	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TB-1
Lab Sample ID: FA19379-2
Matrix: AQ - Trip Blank Water
Method: SW846 8260B
Project: Melrose Air Force Range, NM

Date Sampled: 10/23/14
Date Received: 10/24/14
Percent Solids: n/a

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.33	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.66	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		83-118%
17060-07-0	1,2-Dichloroethane-D4	99%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	105%		83-118%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Southeast ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

TRINITY ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

FA19379

Page 1 of 1
Project Number: A012-109
Chain of Custody Number (1): MAFB2014102302

Facility: Melrose Air Force Range
Project Name / Site Name: 2014 Semiannual
Client Name: Trinity (850) 613-6800
Project Manager: Jonathan Kramer
Collected by: Benjamin Stewart, Jonathan Kramer

Sample Analysis Requested (5) | Quality Assurance Samples (6)

Field Sample ID (20 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	VOCs (8260B)	Explosives (8330)	Metals (Total & Diss) 6020A	Cyanide (9012A)	Mercury (7470A)	Nitrite, Nitrate (300.0)	Chloride, Sulfate (300.0)	Perchlorate (6860)	Alkalinity (2320B)	TDS (2540C)	Hexavalent Chromium 7196	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
1 MA02MW0010		23OCT2014	1143		N	1	WG	12	X	X	X	X	X	X	X	X	X	X	X				D
2 TB-1		23OCT2014	1143		TB	1	WQ	2	X														D

Comments: Dissolved Metals were field filtered

Custody Transfers Prior to Receipt by Laboratory

	Relinquished by (signed)	Date	Time	Received by (signed)	Date	Time
1.		10/23/14	1636	FX		
2.	FX			Jesse (ATSR)	10-24-14	09:15
3.						

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:	No	Shipped No.:	1
Method of Shipment:	FedEx	Airbill Number:	
Analytical Lab:	Accutest	Delivery Location:	Orlando, FL
Lab Recipient:		Delivery Date/Time:	

1.) Chain of Custody Number = site name (e.g., SS125) and then date (yyyymmdd) collected + custody number (e.g. SS125-20110902-01)....September 2, 2011.
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-t) Sample, FD = Field Duplicate (-s) Samples, FR = Field Replicate (-r) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-a)
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/11 = 01, if sampled again on 10/10/11 = 02, etc.)
4.) Matrix Codes: GS = Soil Gas, WG = Ground Water, WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS= Sulfoc Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ= Soil Blanks
5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
6.) Quality assurance samples are assigned by date (ddmmyy) and the number of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or ambient blank collected on May 10, 2011 in association with samples on the COC will be designated 10051101 in the Blank Lot Control Number field).
7.) Trip Blanks shall accompany to the first well sampled with VOCs, for example: ST069-MW-085-c

2-8

FA19379: Chain of Custody
Page 1 of 3

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA 19379 CLIENT: TAINITY PROJECT: A012-109

DATE/TIME RECEIVED: 10-24-14 09:15 {MM/DD/YY 24:00} NUMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER

AIRBILL NUMBERS: 8064 4809 3312

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- [X] TRIP BLANK PROVIDED
- [ ] TRIP BLANK NOT PROVIDED
- [ ] TRIP BLANK NOT ON COC
- [X] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [X] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM_____ 5-GRAM_____

NUMBER OF 5035 FIELD KITS ? _____

NUMBER OF LAB FILTERED METALS ? _____

TEMPERATURE INFORMATION

- [ ] IR THERM ID 1 CORR. FACTOR +0.1
- [ ] OBSERVED TEMPS: 2.1
- [ ] CORRECTED TEMPS: 2.8

SAMPLE INFORMATION

- [ ] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- [ ] BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] RESIDUAL CHLORINE PRESENT

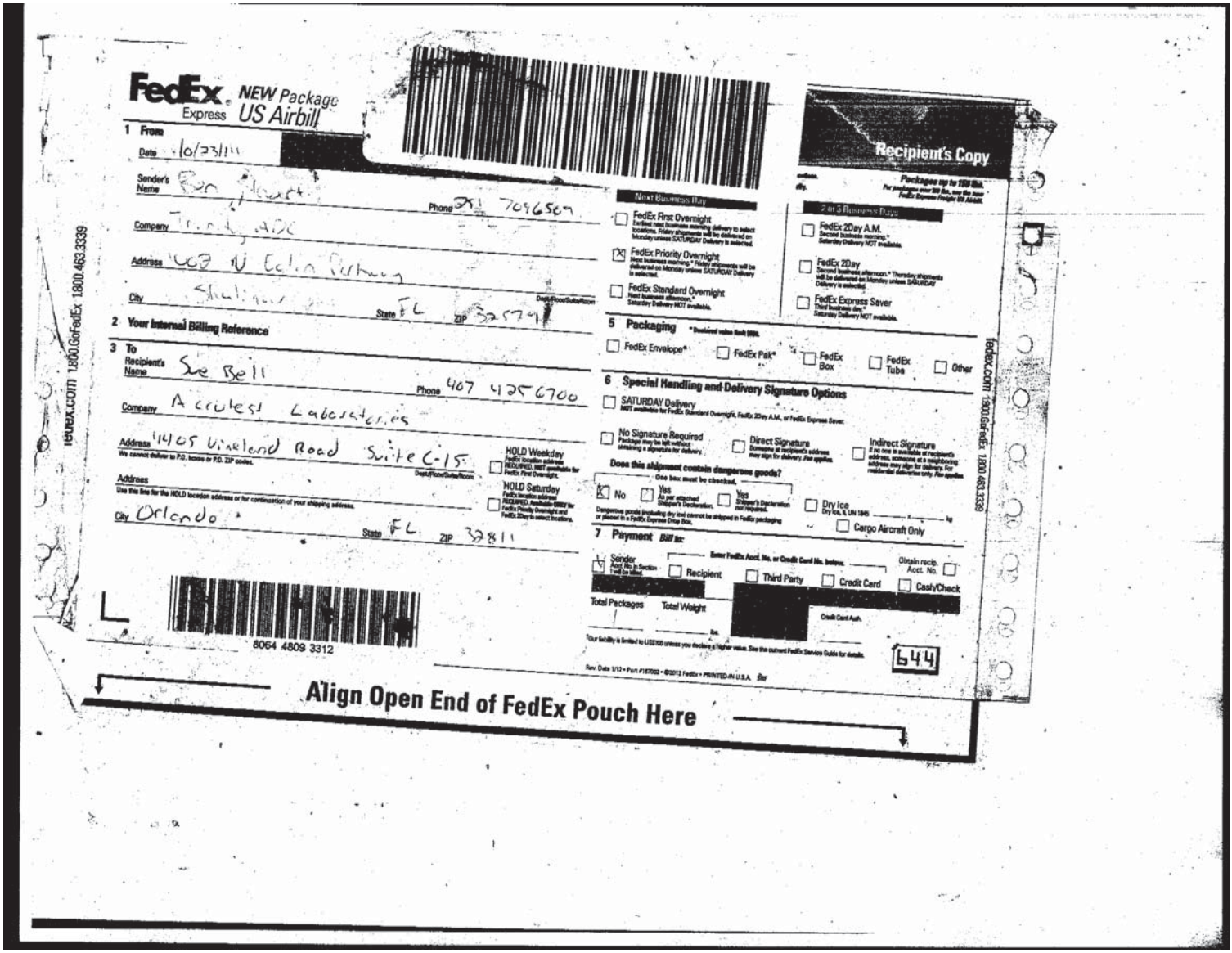
{APPICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

SUMMARY OF COMMENTS: _____

TECHNICIAN SIGNATURE/DATE [signature] 10-24-14 REVIEWER SIGNATURE/DATE [signature] 10/24/14

RS 04/14 receipt confirmation 041514.xls

FA19379: Chain of Custody
Page 2 of 3



FA19379: Chain of Custody
Page 3 of 3

Southeast ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: FA19379
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO999-MB	O25955.D	1	11/03/14	TD	n/a	n/a	VO999

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA19379-1, FA19379-2

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	11	ug/l	
71-43-2	Benzene	ND	1.0	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.26	ug/l	
75-25-2	Bromoform	ND	1.0	0.38	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.24	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.20	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.40	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.25	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.24	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.36	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.34	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.28	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.54	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.53	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	1.5	ug/l	
100-42-5	Styrene	ND	1.0	0.23	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.34	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.27	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.26	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.33	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.66	ug/l	

Method Blank Summary

Job Number: FA19379
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO999-MB	O25955.D	1	11/03/14	TD	n/a	n/a	VO999

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA19379-1, FA19379-2

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	102%	83-118%
17060-07-0	1,2-Dichloroethane-D4	101%	79-125%
2037-26-5	Toluene-D8	102%	85-112%
460-00-4	4-Bromofluorobenzene	105%	83-118%

Blank Spike Summary

Job Number: FA19379
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO999-BS	O25953.D	1	11/03/14	TD	n/a	n/a	VO999

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA19379-1, FA19379-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	106	85	50-147
71-43-2	Benzene	25	22.0	88	81-122
75-27-4	Bromodichloromethane	25	22.4	90	79-123
75-25-2	Bromoform	25	17.4	70	66-123
108-90-7	Chlorobenzene	25	22.7	91	82-124
75-00-3	Chloroethane	25	22.9	92	62-144
67-66-3	Chloroform	25	22.7	91	80-124
75-15-0	Carbon disulfide	25	28.3	113	66-148
56-23-5	Carbon tetrachloride	25	19.9	80	76-136
75-34-3	1,1-Dichloroethane	25	22.1	88	81-122
75-35-4	1,1-Dichloroethylene	25	25.0	100	78-137
107-06-2	1,2-Dichloroethane	25	21.8	87	75-125
78-87-5	1,2-Dichloropropane	25	22.5	90	76-124
124-48-1	Dibromochloromethane	25	22.8	91	78-122
156-59-2	cis-1,2-Dichloroethylene	25	23.0	92	78-120
10061-01-5	cis-1,3-Dichloropropene	25	18.9	76	75-118
156-60-5	trans-1,2-Dichloroethylene	25	23.2	93	76-127
10061-02-6	trans-1,3-Dichloropropene	25	20.0	80	80-120
100-41-4	Ethylbenzene	25	22.0	88	81-121
591-78-6	2-Hexanone	125	94.5	76	61-129
108-10-1	4-Methyl-2-pentanone	125	89.4	72	66-122
74-83-9	Methyl bromide	25	27.7	111	59-143
74-87-3	Methyl chloride	25	23.2	93	50-159
75-09-2	Methylene chloride	25	21.4	86	69-135
78-93-3	Methyl ethyl ketone	125	106	85	56-143
100-42-5	Styrene	25	21.8	87	78-119
71-55-6	1,1,1-Trichloroethane	25	22.7	91	75-130
79-34-5	1,1,2,2-Tetrachloroethane	25	19.8	79	72-120
79-00-5	1,1,2-Trichloroethane	25	21.4	86	76-119
127-18-4	Tetrachloroethylene	25	23.5	94	76-135
108-88-3	Toluene	25	21.6	86	80-120
79-01-6	Trichloroethylene	25	22.2	89	81-126
75-01-4	Vinyl chloride	25	25.3	101	69-159
1330-20-7	Xylene (total)	75	60.7	81	80-126

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA19379
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO999-BS	O25953.D	1	11/03/14	TD	n/a	n/a	VO999

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA19379-1, FA19379-2

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	98%	79-125%
2037-26-5	Toluene-D8	100%	85-112%
460-00-4	4-Bromofluorobenzene	103%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA19379
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA19369-1MS	O25972.D	1	11/04/14	TD	n/a	n/a	VO999
FA19369-1MSD	O25973.D	1	11/04/14	TD	n/a	n/a	VO999
FA19369-1	O25960.D	1	11/03/14	TD	n/a	n/a	VO999

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA19379-1, FA19379-2

CAS No.	Compound	FA19369-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		125	102	82	125	86.5	69	16	50-147/21
71-43-2	Benzene	ND		25	24.6	98	25	19.4	78*	24*	81-122/14
75-27-4	Bromodichloromethane	ND		25	26.6	106	25	19.8	79	29*	79-123/19
75-25-2	Bromoform	ND		25	17.0	68	25	13.2	53*	25*	66-123/21
108-90-7	Chlorobenzene	ND		25	26.4	106	25	20.6	82	25*	82-124/14
75-00-3	Chloroethane	ND		25	26.1	104	25	19.1	76	31*	62-144/20
67-66-3	Chloroform	ND		25	27.0	108	25	21.6	86	22*	80-124/15
75-15-0	Carbon disulfide	ND		25	26.1	104	25	19.4	78	29*	66-148/23
56-23-5	Carbon tetrachloride	ND		25	23.2	93	25	17.3	69*	29*	76-136/23
75-34-3	1,1-Dichloroethane	ND		25	27.6	110	25	21.8	87	23*	81-122/15
75-35-4	1,1-Dichloroethylene	ND		25	29.9	120	25	23.6	94	24*	78-137/18
107-06-2	1,2-Dichloroethane	ND		25	26.9	108	25	21.5	86	22*	75-125/14
78-87-5	1,2-Dichloropropane	ND		25	27.7	111	25	21.7	87	24*	76-124/14
124-48-1	Dibromochloromethane	ND		25	19.8	79	25	15.0	60*	28*	78-122/19
156-59-2	cis-1,2-Dichloroethylene	ND		25	27.3	109	25	21.7	87	23*	78-120/15
10061-01-5	cis-1,3-Dichloropropene	ND		25	19.9	80	25	14.6	58*	31*	75-118/23
156-60-5	trans-1,2-Dichloroethylene	ND		25	27.3	109	25	21.7	87	23*	76-127/17
10061-02-6	trans-1,3-Dichloropropene	ND		25	20.5	82	25	15.3	61*	29*	80-120/22
100-41-4	Ethylbenzene	ND		25	25.4	102	25	19.9	80*	24*	81-121/14
591-78-6	2-Hexanone	ND		125	99.8	80	125	81.9	66	20*	61-129/18
108-10-1	4-Methyl-2-pentanone	ND		125	103	82	125	85.6	68	18*	66-122/16
74-83-9	Methyl bromide	ND		25	29.8	119	25	22.8	91	27*	59-143/19
74-87-3	Methyl chloride	ND		25	26.0	104	25	20.2	81	25*	50-159/19
75-09-2	Methylene chloride	ND		25	26.6	106	25	20.8	83	24*	69-135/16
78-93-3	Methyl ethyl ketone	ND		125	115	92	125	95.4	76	19*	56-143/18
100-42-5	Styrene	ND		25	21.0	84	25	15.9	64*	28*	78-119/23
71-55-6	1,1,1-Trichloroethane	ND		25	28.0	112	25	21.9	88	24*	75-130/16
79-34-5	1,1,2,2-Tetrachloroethane	ND		25	24.1	96	25	19.4	78	22*	72-120/14
79-00-5	1,1,2-Trichloroethane	ND		25	24.6	98	25	19.7	79	22*	76-119/14
127-18-4	Tetrachloroethylene	ND		25	21.6	86	25	16.5	66*	27*	76-135/16
108-88-3	Toluene	ND		25	24.8	99	25	19.5	78*	24*	80-120/14
79-01-6	Trichloroethylene	ND		25	26.9	108	25	21.8	87	21*	81-126/15
75-01-4	Vinyl chloride	ND		25	27.2	109	25	21.2	85	25*	69-159/18
1330-20-7	Xylene (total)	ND		75	69.2	92	75	53.6	71*	25*	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA19379
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA19369-1MS	O25972.D	1	11/04/14	TD	n/a	n/a	VO999
FA19369-1MSD	O25973.D	1	11/04/14	TD	n/a	n/a	VO999
FA19369-1	O25960.D	1	11/03/14	TD	n/a	n/a	VO999

The QC reported here applies to the following samples: **Method:** SW846 8260B

FA19379-1, FA19379-2

CAS No.	Surrogate Recoveries	MS	MSD	FA19369-1	Limits
1868-53-7	Dibromofluoromethane	104%	104%	105%	83-118%
17060-07-0	1,2-Dichloroethane-D4	100%	98%	102%	79-125%
2037-26-5	Toluene-D8	94%	95%	101%	85-112%
460-00-4	4-Bromofluorobenzene	100%	101%	103%	83-118%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: FA19379
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Sample:	VO999-BFB	**Injection Date:**	11/03/14
Lab File ID:	O25942.D	**Injection Time:**	12:43
Instrument ID:	GCMSO		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	51267	21.4		Pass
75	30.0 - 60.0% of mass 95	105760	44.2		Pass
95	Base peak, 100% relative abundance	239211	100.0		Pass
96	5.0 - 9.0% of mass 95	15932	6.66		Pass
173	Less than 2.0% of mass 174	1385	0.58	(0.63) [a]	Pass
174	50.0 - 100.0% of mass 95	220608	92.2		Pass
175	5.0 - 9.0% of mass 174	16039	6.70	(7.27) [a]	Pass
176	95.0 - 101.0% of mass 174	214059	89.5	(97.0) [a]	Pass
177	5.0 - 9.0% of mass 176	13696	5.73	(6.40) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VO999-IC999	O25944.D	11/03/14	13:29	00:46	Initial cal 1
VO999-IC999	O25945.D	11/03/14	13:53	01:10	Initial cal 2
VO999-IC999	O25946.D	11/03/14	14:16	01:33	Initial cal 3
VO999-ICC999	O25947.D	11/03/14	14:40	01:57	Initial cal 4
VO999-IC999	O25949.D	11/03/14	15:27	02:44	Initial cal 5
VO999-IC999	O25950.D	11/03/14	15:50	03:07	Initial cal 6
VO999-ICV999	O25952.D	11/03/14	16:39	03:56	Initial cal verification 4
VO999-BS	O25953.D	11/03/14	17:02	04:19	Blank Spike
VO999-MB	O25955.D	11/03/14	17:48	05:05	Method Blank
ZZZZZZ	O25956.D	11/03/14	18:11	05:28	(unrelated sample)
FA19379-2	O25957.D	11/03/14	18:33	05:50	TB-1
ZZZZZZ	O25958.D	11/03/14	18:57	06:14	(unrelated sample)
ZZZZZZ	O25959.D	11/03/14	19:20	06:37	(unrelated sample)
FA19369-1	O25960.D	11/03/14	19:43	07:00	(used for QC only; not part of job FA19379)
FA19379-1	O25961.D	11/03/14	20:06	07:23	MA02MW001D
ZZZZZZ	O25962.D	11/03/14	20:29	07:46	(unrelated sample)
ZZZZZZ	O25963.D	11/03/14	20:53	08:10	(unrelated sample)
ZZZZZZ	O25964.D	11/03/14	21:16	08:33	(unrelated sample)
ZZZZZZ	O25965.D	11/03/14	21:38	08:55	(unrelated sample)
ZZZZZZ	O25966.D	11/03/14	22:01	09:18	(unrelated sample)
ZZZZZZ	O25967.D	11/03/14	22:24	09:41	(unrelated sample)
ZZZZZZ	O25968.D	11/03/14	22:47	10:04	(unrelated sample)
ZZZZZZ	O25969.D	11/03/14	23:10	10:27	(unrelated sample)
ZZZZZZ	O25970.D	11/03/14	23:33	10:50	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: FA19379
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Sample:	VO999-BFB	**Injection Date:**	11/03/14
Lab File ID:	O25942.D	**Injection Time:**	12:43
Instrument ID:	GCMSO		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	O25971.D	11/03/14	23:56	11:13	(unrelated sample)
FA19369-1MS	O25972.D	11/04/14	00:20	11:37	Matrix Spike
FA19369-1MSD	O25973.D	11/04/14	00:42	11:59	Matrix Spike Duplicate

Volatile Internal Standard Area Summary

Job Number: FA19379
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Check Std:	VO999-ICC999	**Injection Date:**	11/03/14
Lab File ID:	O25947.D	**Injection Time:**	14:40
Instrument ID:	GCMSO	**Method:**	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Initial Cal [a]	586662	7.48	820331	10.62	524736	13.08	104391	5.11
Check Std [b]	586662	7.48	820331	10.62	524736	13.08	104391	5.11
Upper Limit [c]	1173324	7.98	1640662	11.12	1049472	13.58	208782	5.61
Lower Limit [d]	293331	6.98	410166	10.12	262368	12.58	52196	4.61

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
VO999-BS	713363	7.47	980875	10.62	639235	13.08	121730	5.11
VO999-MB	547401	7.47	745111	10.62	458321	13.08	86423	5.10
ZZZZZZ	639863	7.48	883713	10.62	552456	13.08	87422	5.11
FA19379-2	510044	7.47	714422	10.62	438544	13.08	69893	5.11
ZZZZZZ	493731	7.47	699511	10.62	429417	13.08	70852	5.10
ZZZZZZ	505343	7.48	726432	10.62	437236	13.08	69170	5.10
FA19369-1	453560	7.47	633611	10.62	395567	13.08	62973	5.10
FA19379-1	467200	7.47	653957	10.62	403768	13.08	66696	5.09
ZZZZZZ	494294	7.47	713616	10.62	452959	13.08	68636	5.10
ZZZZZZ	425871	7.47	606999	10.62	376001	13.08	60563	5.10
ZZZZZZ	409939	7.47	594042	10.62	366858	13.08	60554	5.09
ZZZZZZ	462144	7.47	669642	10.62	422499	13.08	70104	5.10
ZZZZZZ	391365	7.47	572333	10.62	354778	13.08	61082	5.10
ZZZZZZ	394557	7.47	580038	10.62	357891	13.08	61670	5.10
ZZZZZZ	440917	7.47	666196	10.62	430930	13.08	68176	5.10
ZZZZZZ	460216	7.47	673267	10.62	443851	13.08	77903	5.10
ZZZZZZ	463313	7.47	684237	10.62	418388	13.08	75775	5.09
ZZZZZZ	461349	7.47	708060	10.62	442093	13.08	75767	5.11
FA19369-1MS	482166	7.47	731186	10.62	483293	13.08	86181	5.10
FA19369-1MSD	631008	7.47	952017	10.62	625882	13.08	117449	5.12

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5
IS 3 = 1,4-Dichlorobenzene-d4
IS 4 = Tert Butyl Alcohol-D10

(a) Initial Cal is: VO999-ICC999 O25947.D 11/03/14 14:40
(b) Check Std Limit = -50 to + 100% of initial cal area.
(c) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: FA19379
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Method: SW846 8260B **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
FA19379-1	O25961.D	102	103	101	104
FA19379-2	O25957.D	102	99	101	105
FA19369-1MS	O25972.D	104	100	94	100
FA19369-1MSD	O25973.D	104	98	95	101
VO999-BS	O25953.D	101	98	100	103
VO999-MB	O25955.D	102	101	102	105

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	83-118%
S2 = 1,2-Dichloroethane-D4	79-125%
S3 = Toluene-D8	85-112%
S4 = 4-Bromofluorobenzene	83-118%

Initial Calibration Summary

Job Number: FA19379 **Sample:** VO999-ICC999
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** O25947.D
Project: Melrose Air Force Range, NM

Response Factor Report MSVOA12

Method : C:\msdchem\1\methods\msoNCOXY.m (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624
Last Update : Tue Nov 04 14:45:29 2014
Response via : Initial Calibration

Calibration Files
1 =O25944.D 2 =O25945.D 3 =O25946.D 4 =O25947.D
5 =O25949.D 6 =O25950.D

	Compound	1	2	3	4	5	6	Avg	%RSD
1) I	Fluorobenzene	----------ISTD----------							
2)	Dichlorodifluoromet	0.639	0.876	0.911	0.866	0.899	0.851	0.840	12.03
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9986								
	Response Ratio = 0.00000 + 0.86751 *A								
3) P	Chloromethane	0.968	1.160	1.156	1.110	1.142	1.067	1.101	6.69
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9980								
	Response Ratio = 0.00000 + 1.09479 *A								
4)	1,3-Butadiene	0.546	0.812	0.864	0.896	0.910	0.939	0.828	17.48
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9995								
	Response Ratio = 0.00000 + 0.92451 *A								
5) C	Vinyl Chloride	0.765	0.931	0.970	0.929	0.968	0.943	0.918	8.36
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9996								
	Response Ratio = 0.00000 + 0.94970 *A								
6)	Bromomethane	0.550	0.669	0.645	0.609	0.607	0.545	0.604	8.25
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9941								
	Response Ratio = 0.00000 + 0.57119 *A								
7)	Chloroethane	0.396	0.502	0.488	0.421	0.362	0.257	0.404	22.25
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9978								
	Response Ratio = 0.00000 + 0.55499 *A + -0.14738 *A^2								
8)	Trichlorofluorometh	1.123	1.344	1.420	1.338	1.436	1.323	1.331	8.42
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9969								
	Response Ratio = 0.00000 + 1.35943 *A								
9)	Ethyl Ether	0.446	0.574	0.560	0.563	0.593	0.618	0.559	10.65
10)	1,2-Dichlorotrifluo	0.590	0.723	0.745	0.729	0.777	0.797	0.727	10.04
11) C	1,1-Dichloroethene	0.744	0.924	0.935	0.929	1.016	1.056	0.934	11.51
12)	Freon 113	0.536	0.680	0.686	0.674	0.726	0.741	0.674	10.81
13)	Carbon Disulfide	1.107	1.383	1.390	1.391	1.506	1.567	1.391	11.35
14)	Iodomethane	0.945	1.202	1.202	1.228	1.320	1.384	1.214	12.38
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9978								
	Response Ratio = 0.00000 + 1.34634 *A								
15)	Allyl chloride	0.499	0.776	0.871	0.908	1.000	1.007	0.844	22.48
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9986								
	Response Ratio = 0.00000 + 0.99220 *A								
16)	Methylene Chloride	1.569	1.204	1.063	1.025	1.078	1.085	1.170	17.45
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9994								
	Response Ratio = 0.00000 + 1.07678 *A								

Initial Calibration Summary

Job Number: FA19379 **Sample:** VO999-ICC999
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** O25947.D
Project: Melrose Air Force Range, NM

17)		Acetone	0.058	0.068	0.066	0.065	0.068	0.069	0.066	6.42
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9995								
		Response Ratio = 0.00000 + 0.06828 *A								
18)		Methyl acetate	0.096	0.116	0.113	0.106	0.112	0.116	0.110	6.94
19)		trans-1,2-Dichloroe	0.735	0.914	0.925	0.920	1.004	1.050	0.925	11.68
20)		Hexane	0.468	0.605	0.624	0.638	0.693	0.684	0.619	13.15
21)		Methyl Tert Butyl E	1.144	1.479	1.525	1.571	1.672	1.781	1.529	14.23
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9972								
		Response Ratio = 0.00000 + 1.72304 *A								
22)		Acetonitrile	0.033	0.051	0.041	0.046	0.047	0.048	0.044	14.20
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9993								
		Response Ratio = 0.00000 + 0.04706 *A								
23)		Di-isopropyl ether	1.588	2.056	2.173	2.242	2.438	2.562	2.176	15.67
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9975								
		Response Ratio = 0.00000 + 2.48580 *A								
24)		Chloroprene	0.492	0.817	0.963	1.025	1.138	1.188	0.937	27.17
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9973								
		Response Ratio = 0.00000 + 1.15208 *A								
25)	P	1,1-Dichloroethane	0.945	1.195	1.193	1.175	1.271	1.323	1.184	10.97
26)		Acrylonitrile	0.185	0.248	0.252	0.247	0.268	0.273	0.245	12.86
27)		ETBE	1.296	1.805	1.940	2.001	2.189	2.343	1.929	18.85
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9963								
		Response Ratio = 0.00000 + 2.25577 *A								
28)		Vinyl acetate	0.483	0.773	0.783	0.759	0.960	0.987	0.791	22.87
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9903								
		Response Ratio = 0.00000 + 0.91654 *A								
29)		cis-1,2-Dichloroeth	0.542	0.659	0.658	0.661	0.719	0.748	0.664	10.65
30)		2,2-Dichloropropane	0.571	0.740	0.740	0.764	0.876	0.902	0.766	15.48
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9965								
		Response Ratio = 0.00000 + 0.87761 *A								
31)		Bromochloromethane	0.322	0.402	0.398	0.392	0.423	0.444	0.397	10.44
32)		Cyclohexane	0.733	1.040	1.233	1.264	1.386	1.427	1.181	21.85
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9983								
		Response Ratio = 0.00000 + 1.39451 *A								
33)	C	Chloroform	0.927	1.183	1.164	1.134	1.228	1.276	1.152	10.51
34)		Ethyl acetate	0.405	0.585	0.590	0.582	0.634	0.652	0.575	15.29
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9983								
		Response Ratio = 0.00000 + 0.63882 *A								
35)		Tetrahydrofuran	0.152	0.179	0.172	0.175	0.183	0.196	0.176	8.39
36)	S	Dibromofluoromethan	0.347	0.343	0.349	0.344	0.350	0.351	0.347	0.96
37)		Carbon Tetrachlorid	0.760	0.914	0.954	0.953	1.165	1.072	0.970	14.30
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9936								
		Response Ratio = 0.00000 + 1.08476 *A								
38)		1,1,1-Trichloroetha	0.805	0.957	0.970	0.971	1.030	1.069	0.967	9.33
39)		2-Butanone	0.225	0.295	0.298	0.306	0.323	0.342	0.298	13.35
40)		1,1-Dichloropropene	0.499	0.701	0.751	0.753	0.828	0.864	0.733	17.52
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9976								
		Response Ratio = 0.00000 + 0.83994 *A								

Initial Calibration Summary

Job Number: FA19379 **Sample:** VO999-ICC999
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** O25947.D
Project: Melrose Air Force Range, NM

```
41)     tert-Butyl Formate  0.234 0.407 0.445 0.478 0.565 0.640 0.462  30.33
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9999
              Response Ratio = 0.00000 + 0.38159 *A + 0.01296 *A^2

42)     Propionitrile       0.053 0.100 0.093 0.097 0.101 0.104 0.091  21.09
            ---- Linear regr., Force(0,0) ----  Coefficient =  0.9991
              Response Ratio = 0.00000 + 0.10188 *A

43)     Methacrylonitrile   0.223 0.427 0.411 0.429 0.454 0.444 0.398  21.91
            ---- Linear regr., Force(0,0) ----  Coefficient =  0.9994
              Response Ratio = 0.00000 + 0.44446 *A

44)     Benzene             1.765 2.243 2.243 2.237 2.418 2.547 2.242  11.83
45)     TAME                1.016 1.487 1.546 1.583 1.745 1.856 1.539  18.85
            ---- Linear regr., Force(0,0) ----  Coefficient =  0.9964
              Response Ratio = 0.00000 + 1.78983 *A

46) S   1,2-Dichloroethane- 0.360 0.362 0.351 0.349 0.355 0.351 0.355   1.46
47)     1,2-Dichloroethane  0.777 0.925 0.884 0.871 0.926 0.965 0.891   7.31
48)     Trichloroethene     0.596 0.675 0.666 0.659 0.702 0.740 0.673   7.12
49)     Methylcyclohexane   0.652 0.926 1.069 1.087 1.205 1.250 1.032  21.13
            ---- Linear regr., Force(0,0) ----  Coefficient =  0.9977
              Response Ratio = 0.00000 + 1.21694 *A

50)     Dibromomethane      0.341 0.416 0.401 0.401 0.422 0.440 0.403   8.38
51) C   1,2-Dichloropropane 0.482 0.638 0.626 0.627 0.677 0.708 0.627  12.41
52)     Bromodichloromethan 0.593 0.760 0.779 0.787 0.855 0.897 0.779  13.44
53)     Methyl methacrylate 0.168 0.367 0.427 0.496 0.531 0.545 0.422  33.45
            ---- Linear regr., Force(0,0) ----  Coefficient =  0.9984
              Response Ratio = 0.00000 + 0.53320 *A

54)     2-Chloroethyl vinyl 0.175 0.314 0.372 0.345 0.399 0.445 0.341  27.32
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9993
              Response Ratio = 0.00000 + 0.29954 *A + 0.01440 *A^2

55)     cis-1,3-Dichloropro 0.593 0.854 0.898 0.936 1.029 1.070 0.896  18.85
            ---- Linear regr., Force(0,0) ----  Coefficient =  0.9976
              Response Ratio = 0.00000 + 1.04091 *A


56) I   Chlorobenzene-d5      ----------------ISTD--------------------
57) S   Toluene-d8           0.945 0.917 0.905 0.896 0.871 0.918 0.909   2.71
58) C   Toluene             1.563 1.817 1.771 1.782 1.891 2.068 1.815   9.09
59)     2-Nitropropane      0.067 0.091 0.101 0.106 0.113 0.129 0.101  20.97
            ---- Linear regr., Force(0,0) ----  Coefficient =  0.9918
              Response Ratio = 0.00000 + 0.12161 *A

60)     4-Methyl-2-pentanon 0.281 0.412 0.441 0.460 0.476 0.541 0.435  19.95
            ---- Linear regr., Force(0,0) ----  Coefficient =  0.9927
              Response Ratio = 0.00000 + 0.51170 *A

61)     trans-1,3-Dichlorop 0.396 0.537 0.586 0.608 0.658 0.724 0.585  19.18
            ---- Linear regr., Force(0,0) ----  Coefficient =  0.9945
              Response Ratio = 0.00000 + 0.69014 *A

62)     Tetrachloroethene   0.551 0.722 0.776 0.838 0.652 0.727 0.711  14.01
            ---- Linear regr., Force(0,0) ----  Coefficient =  0.9885
              Response Ratio = 0.00000 + 0.71692 *A

63)     Ethyl methacrylate  0.156 0.374 0.426 0.478 0.517 0.565 0.419  34.59
```

```
            ---- Linear regr., Force(0,0) ----  Coefficient =  0.9951
              Response Ratio = 0.00000 + 0.53904 *A

64)     1,1,2-Trichloroetha 0.288 0.351 0.340 0.340 0.348 0.377 0.341   8.53
65)     Dibromochloromethan 0.365 0.480 0.499 0.525 0.571 0.620 0.510  17.11
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  1.0000
              Response Ratio = 0.00000 + 0.46215 *A + 0.07859 *A^2

66)     1,3-Dichloropropane 0.477 0.643 0.625 0.632 0.666 0.712 0.626  12.69
67)     1,2-Dibromoethane   0.327 0.437 0.434 0.449 0.470 0.503 0.437  13.66
68)     2-hexanone          0.201 0.314 0.339 0.352 0.369 0.399 0.329  20.93
            ---- Linear regr., Force(0,0) ----  Coefficient =  0.9967
              Response Ratio = 0.00000 + 0.38445 *A

69)     1-Chlorohexane      0.353 0.532 0.617 0.647 0.717 0.756 0.604  24.15
            ---- Linear regr., Force(0,0) ----  Coefficient =  0.9968
              Response Ratio = 0.00000 + 0.73096 *A

70) C   Ethylbenzene        1.712 2.088 2.121 2.147 2.363 2.508 2.156  12.62
71) P   Chlorobenzene       1.186 1.360 1.315 1.301 1.415 1.506 1.347   8.07
72)     1,1,1,2-Tetrachloro 0.409 0.501 0.512 0.520 0.554 0.610 0.518  12.79
73)     m,p-Xylene          1.006 1.461 1.556 1.583 1.770 1.903 1.546  19.99
            ---- Linear regr., Force(0,0) ----  Coefficient =  0.9952
              Response Ratio = 0.00000 + 1.82545 *A

74)     o-Xylene            0.848 1.220 1.417 1.481 1.621 1.765 1.392  23.30
            ---- Linear regr., Force(0,0) ----  Coefficient =  0.9951
              Response Ratio = 0.00000 + 1.68773 *A

75)     Styrene             0.592 1.027 1.229 1.308 1.462 1.554 1.195  29.13
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9998
              Response Ratio = 0.00000 + 1.17158 *A + 0.19374 *A^2

76) P   Bromoform           0.238 0.296 0.332 0.367 0.402 0.444 0.347  21.44
            ---- Linear regr., Force(0,0) ----  Coefficient =  0.9936
              Response Ratio = 0.00000 + 0.42193 *A

77)     Isopropylbenzene    0.989 1.582 1.864 1.954 2.121 2.313 1.804  25.99
            ---- Linear regr., Force(0,0) ----  Coefficient =  0.9953
              Response Ratio = 0.00000 + 2.21161 *A


78) I   1,4-Dichlorobenzene-d ----------------ISTD--------------------
79) S   4-Bromofluorobenzen 0.764 0.756 0.749 0.750 0.740 0.734 0.749   1.45
80)     cis-1,4-Dichloro-2- 0.129 0.196 0.201 0.220 0.242 0.262 0.208  22.19
            ---- Linear regr., Force(0,0) ----  Coefficient =  0.9949
              Response Ratio = 0.00000 + 0.25074 *A

81)     n-Propylbenzene     2.463 3.274 3.533 3.658 3.924 4.158 3.502  16.97
            ---- Linear regr., Force(0,0) ----  Coefficient =  0.9974
              Response Ratio = 0.00000 + 4.02674 *A

82)     Bromobenzene        0.787 1.014 1.001 1.016 1.054 1.110 0.997  11.04
83) P   1,1,2,2-Tetrachloro 0.775 0.901 0.853 0.844 0.873 0.920 0.861   5.89
84)     1,3,5-Trimethylbenz 1.612 2.586 2.857 2.961 3.134 3.376 2.754  22.48
            ---- Linear regr., Force(0,0) ----  Coefficient =  0.9968
              Response Ratio = 0.00000 + 3.25300 *A

85)     2-Chlorotoluene     1.634 2.270 2.407 2.457 2.607 2.783 2.360  16.80
            ---- Linear regr., Force(0,0) ----  Coefficient =  0.9973
```

```
              Response Ratio = 0.00000 + 2.69122 *A

 86)     trans-1,4-Dichloro- 0.145 0.221 0.245 0.262 0.282 0.307 0.244  23.28
             ---- Linear regr., Force(0,0) ----  Coefficient =  0.9955
              Response Ratio = 0.00000 + 0.29369 *A

 87)     1,2,3-Trichloroprop 0.225 0.273 0.262 0.261 0.262 0.277 0.260   7.03
 88)     Cyclohexanone       0.006 0.017 0.019 0.020 0.021 0.023 0.018  33.97
             ---- Linear regr., Force(0,0) ----  Coefficient =  0.9947
              Response Ratio = 0.00000 + 0.02189 *A

 89)     4-Chlorotoluene     1.343 1.985 2.124 2.161 2.287 2.410 2.052  18.33
             ---- Linear regr., Force(0,0) ----  Coefficient =  0.9981
              Response Ratio = 0.00000 + 2.34342 *A

 90)     a-Methyl Styrene    0.455 1.105 1.343 1.545 1.676 1.754 1.313  36.67
             ---- Linear regr., Force(0,0) ----  Coefficient =  0.9976
              Response Ratio = 0.00000 + 1.70070 *A

 91)     tert-Butylbenzene   0.890 1.344 1.439 1.503 1.537 1.734 1.408  20.23
             ---- Linear regr., Force(0,0) ----  Coefficient =  0.9937
              Response Ratio = 0.00000 + 1.64751 *A

 92)     1,2,4-Trimethylbenz 1.506 2.626 2.893 3.009 3.171 3.392 2.766  24.18
             ---- Linear regr., Force(0,0) ----  Coefficient =  0.9974
              Response Ratio = 0.00000 + 3.27887 *A

 93)     Pentachloroethane   0.250 0.460 0.367 0.364 0.618 0.660 0.453  35.15
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9914
              Response Ratio = 0.00000 + 0.28839 *A + 0.19391 *A^2

 94)     sec-Butylbenzene    1.916 3.055 3.431 3.556 3.745 4.051 3.292  22.81
             ---- Linear regr., Force(0,0) ----  Coefficient =  0.9967
              Response Ratio = 0.00000 + 3.89912 *A

 95)     4-Isopropyltoluene  1.529 2.631 3.116 3.244 3.489 3.724 2.956  26.74
             ---- Linear regr., Force(0,0) ----  Coefficient =  0.9971
              Response Ratio = 0.00000 + 3.59467 *A

 96)     1,3-Dichlorobenzene 1.339 1.791 1.749 1.792 1.889 2.001 1.760  12.80
 97)     1,4-Dichlorobenzene 1.760 2.086 2.030 2.008 2.123 2.264 2.045   8.14
 98)     n-Butylbenzene      0.941 1.441 1.674 1.780 1.958 2.096 1.648  25.12
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  1.0000
              Response Ratio = 0.00000 + 1.58415 *A + 0.25780 *A^2

 99)     Benzyl Chloride     0.155 0.252 0.317 0.341 0.420 0.467 0.326  34.72
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9996
              Response Ratio = 0.00000 + 0.27660 *A + 0.09648 *A^2

100)     1,2-Dichlorobenzene 1.326 1.731 1.704 1.756 1.833 1.961 1.719  12.42
101)     1,2-Dibromo-3-Chlor 0.079 0.108 0.115 0.127 0.131 0.150 0.118  20.21
             ---- Linear regr., Force(0,0) ----  Coefficient =  0.9922
              Response Ratio = 0.00000 + 0.14113 *A

102)     Hexachlorobutadiene 0.527 0.641 0.691 0.731 0.782 0.854 0.704  16.16
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9999
              Response Ratio = 0.00000 + 0.63872 *A + 0.10669 *A^2

103)     1,2,4-Trichlorobenz 0.858 1.193 1.325 1.419 1.502 1.668 1.328  21.14
             ---- Linear regr., Force(0,0) ----  Coefficient =  0.9943
```

Initial Calibration Summary

Job Number: FA19379 **Sample:** VO999-ICC999
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** O25947.D
Project: Melrose Air Force Range, NM

```
               Response Ratio = 0.00000 + 1.58797 *A

104)     Naphthalene          1.350 2.133 2.728 3.003 3.115 3.531 2.643  29.69
             ---- Linear regr., Force(0,0) ----  Coefficient =  0.9931
               Response Ratio = 0.00000 + 3.33918 *A

105)     1,2,3-Trichlorobenz 0.819 1.185 1.284 1.341 1.390 1.554 1.262  19.76
             ---- Linear regr., Force(0,0) ----  Coefficient =  0.9942
               Response Ratio = 0.00000 + 1.47953 *A


106) I   Tert Butyl Alcohol-d1 ----------------ISTD---------------------
107)     Ethanol              0.048 0.285 0.196 0.192 0.182 0.194 0.183  41.75
             ---- Linear regr., Force(0,0) ----  Coefficient =  0.9975
               Response Ratio = 0.00000 + 0.19025 *A

108)     acrolein             2.255 3.238 3.221 2.903 3.207 3.006 2.972  12.67
109)     Tert Butyl Alcohol   1.640 1.868 1.713 1.677 1.639 1.705 1.707   4.97
110)     tert Amyl alcohol    0.919 1.137 1.261 1.229 1.345 1.406 1.216  14.22
             ---- Linear regr., Force(0,0) ----  Coefficient =  0.9976
               Response Ratio = 0.00000 + 1.36785 *A

111)     Isobutyl alcohol     0.274 0.480 0.479 0.456 0.482 0.473 0.441  18.68
             ---- Linear regr., Force(0,0) ----  Coefficient =  0.9995
               Response Ratio = 0.00000 + 0.47392 *A

112)     1,4-Dioxane          0.081 0.143 0.159 0.149 0.158 0.162 0.142  21.46
             ---- Linear regr., Force(0,0) ----  Coefficient =  0.9990
               Response Ratio = 0.00000 + 0.15929 *A

113)     3,3-Dimethyl-1-buta 0.633 1.152 1.443 1.536 1.632 1.818 1.369  30.88
             ---- Linear regr., Force(0,0) ----  Coefficient =  0.9942
               Response Ratio = 0.00000 + 1.72748 *A

 ---------------------------------------------------------------------------
 (#) = Out of Range

           msoNCOXY.m        Tue Nov 04 14:49:09 2014
```

Initial Calibration Verification

Job Number: FA19379 **Sample:** VO999-ICV999
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** O25952.D
Project: Melrose Air Force Range, NM

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\110314\O25952.D Vial: 17
Acq On : 3 Nov 2014 4:39 pm Operator: TRANGD
Sample : ICV999-4 Inst : MSVOA12
Misc : MS28804,VO999,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\msoNCOXY.m (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624
Last Update : Tue Nov 04 14:45:29 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	110	0.00	7.47
		Amount	Calc.	%Drift			
2	Dichlorodifluoromethane	40.000	37.155	7.1	102	0.00	2.56
3 P	Chloromethane	40.000	36.885	7.8	100	0.00	2.76
4	1,3-Butadiene	40.000	1.618	96.0#	5	0.00	2.89
5 C	Vinyl Chloride	40.000	37.474	6.3	105	0.00	2.91
6	Bromomethane	40.000	39.388	1.5	101	0.00	3.31
7	Chloroethane	40.000	32.382	19.0	97	0.00	3.46
8	Trichlorofluoromethane	40.000	35.906	10.2	100	0.00	3.68
		AvgRF	CCRF	%Dev			
9	Ethyl Ether	0.559	0.588	-5.2	115	0.00	3.96
10	1,2-Dichlorotrifluoroetha	0.727	0.721	0.8	109	0.00	4.20
11 C	1,1-Dichloroethene	0.934	0.947	-1.4	112	0.00	4.22
12	Freon 113	0.674	0.679	-0.7	111	0.00	4.28
13	Carbon Disulfide	1.391	1.418	-1.9	112	0.00	4.27
		Amount	Calc.	%Drift			
14	Iodomethane	40.000	37.833	5.4	114	0.00	4.39
15	Allyl chloride	40.000	37.873	5.3	114	0.00	4.72
16	Methylene Chloride	40.000	38.578	3.6	111	0.00	4.84
17	Acetone	200.000	185.567	7.2	106	0.00	4.87
		AvgRF	CCRF	%Dev			
18	Methyl acetate	0.110	0.119	-8.2	124	0.00	4.99
19	trans-1,2-Dichloroethene	0.925	0.939	-1.5	112	0.00	5.01
20	Hexane	0.619	0.609	1.6	105	0.00	5.07
		Amount	Calc.	%Drift			
21	Methyl Tert Butyl Ether	40.000	38.651	3.4	116	0.00	5.12
22	Acetonitrile	400.000	342.834	14.3	96	0.00	5.37
23	Di-isopropyl ether	40.000	37.418	6.5	114	0.00	5.49
24	Chloroprene	40.000	34.017	15.0	105	0.00	5.62
		AvgRF	CCRF	%Dev			
25 P	1,1-Dichloroethane	1.184	1.206	-1.9	113	0.00	5.65
26	Acrylonitrile	0.245	0.247	-0.8	110	0.00	5.70
		Amount	Calc.	%Drift			
27	ETBE	40.000	37.702	5.7	117	0.00	5.87
28	Vinyl acetate	200.000	183.531	8.2	122	0.00	5.87

Initial Calibration Verification

Job Number: FA19379
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM
Sample: VO999-ICV999
Lab FileID: O25952.D

		AvgRF	CCRF	%Dev			
29	cis-1,2-Dichloroethene	0.664	0.682	-2.7	113	0.00	6.21

		Amount	Calc.	%Drift			
30	2,2-Dichloropropane	40.000	37.808	5.5	119	0.00	6.34

		AvgRF	CCRF	%Dev			
31	Bromochloromethane	0.397	0.410	-3.3	115	0.00	6.42

		Amount	Calc.	%Drift			
32	Cyclohexane	40.000	36.657	8.4	111	0.00	6.45

		AvgRF	CCRF	%Dev			
33 C	Chloroform	1.152	1.176	-2.1	114	0.00	6.47

		Amount	Calc.	%Drift			
34	Ethyl acetate	200.000	182.447	8.8	110	0.00	6.56

		AvgRF	CCRF	%Dev			
35	Tetrahydrofuran	0.176	0.182	-3.4	114	0.00	6.64
36 S	Dibromofluoromethane	0.347	0.349	-0.6	111	0.00	6.66

		Amount	Calc.	%Drift			
37	Carbon Tetrachloride	40.000	35.751	10.6	112	0.00	6.64

		AvgRF	CCRF	%Dev			
38	1,1,1-Trichloroethane	0.967	1.003	-3.7	113	0.00	6.71
39	2-Butanone	0.298	0.310	-4.0	111	0.00	6.76

		Amount	Calc.	%Drift			
40	1,1-Dichloropropene	40.000	36.836	7.9	113	0.00	6.82
41	tert-Butyl Formate	400.000	441.524	-10.4	126	0.00	6.92
42	Propionitrile	400.000	367.148	8.2	106	0.00	7.07
43	Methacrylonitrile	400.000	368.006	8.0	105	0.00	7.10

		AvgRF	CCRF	%Dev			
44	Benzene	2.242	2.281	-1.7	112	0.00	7.07

		Amount	Calc.	%Drift			
45	TAME	40.000	37.751	5.6	117	0.00	7.16

		AvgRF	CCRF	%Dev			
46 S	1,2-Dichloroethane-d4	0.355	0.351	1.1	110	0.00	7.20
47	1,2-Dichloroethane	0.891	0.903	-1.3	114	0.00	7.27
48	Trichloroethene	0.673	0.664	1.3	111	0.00	7.64

		Amount	Calc.	%Drift			
49	Methylcyclohexane	40.000	35.989	10.0	111	0.00	7.65

		AvgRF	CCRF	%Dev			
50	Dibromomethane	0.403	0.416	-3.2	114	0.00	8.07
51 C	1,2-Dichloropropane	0.627	0.650	-3.7	114	0.00	8.16
52	Bromodichloromethane	0.779	0.803	-3.1	112	0.00	8.21

		Amount	Calc.	%Drift			
53	Methyl methacrylate	40.000	39.958	0.1	118	0.00	8.33
54	2-Chloroethyl vinyl ether	200.000	224.360	-12.2	130	0.00	8.75
55	cis-1,3-Dichloropropene	40.000	37.550	6.1	115	0.00	8.84

Initial Calibration Verification

Job Number: FA19379 **Sample:** VO999-ICV999
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** O25952.D
Project: Melrose Air Force Range, NM

			AvgRF	CCRF	%Dev			
56	I	Chlorobenzene-d5	1.000	1.000	0.0	110	0.00	10.62
57	S	Toluene-d8	0.909	0.893	1.8	109	0.00	9.03
58	C	Toluene	1.815	1.811	0.2	111	0.00	9.09

		Amount	Calc.	%Drift			
59	2-Nitropropane	200.000	180.913	9.5	113	0.00	9.31
60	4-Methyl-2-pentanone	200.000	180.457	9.8	110	0.00	9.43
61	trans-1,3-Dichloropropene	40.000	37.267	6.8	116	0.00	9.49
62	Tetrachloroethene	40.000	39.559	1.1	93	0.00	9.48
63	Ethyl methacrylate	40.000	33.135	17.2	102	0.00	9.61

		AvgRF	CCRF	%Dev			
64	1,1,2-Trichloroethane	0.341	0.349	-2.3	113	0.00	9.65

		Amount	Calc.	%Drift			
65	Dibromochloromethane	40.000	41.241	-3.1	113	0.00	9.85

		AvgRF	CCRF	%Dev			
66	1,3-Dichloropropane	0.626	0.658	-5.1	114	0.00	9.94
67	1,2-Dibromoethane	0.437	0.469	-7.3	114	0.00	10.11

		Amount	Calc.	%Drift			
68	2-hexanone	200.000	182.172	8.9	109	0.00	10.27
69	1-Chlorohexane	40.000	36.025	9.9	112	0.00	10.58

		AvgRF	CCRF	%Dev			
70	C	Ethylbenzene	2.156	2.189	-1.5	112	0.00	10.64
71	P	Chlorobenzene	1.347	1.346	0.1	113	0.00	10.63
72		1,1,1,2-Tetrachloroethane	0.518	0.543	-4.8	114	0.00	10.69

		Amount	Calc.	%Drift			
73	m,p-Xylene	80.000	72.157	9.8	114	0.00	10.79
74	o-Xylene	40.000	36.498	8.8	114	0.00	11.24
75	Styrene	40.000	40.721	-1.8	113	0.00	11.29
76	P	Bromoform	40.000	35.952	10.1	113	0.00	11.34
77		Isopropylbenzene	40.000	35.890	10.3	111	0.00	11.56

			AvgRF	CCRF	%Dev			
78	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	113	0.00	13.08
79	S	4-Bromofluorobenzene	0.749	0.756	-0.9	114	0.00	11.88

		Amount	Calc.	%Drift			
80	cis-1,4-Dichloro-2-butene	40.000	39.275	1.8	126	0.00	11.93
81	n-Propylbenzene	40.000	36.083	9.8	112	0.00	12.00

		AvgRF	CCRF	%Dev			
82	Bromobenzene	0.997	1.025	-2.8	114	0.00	12.01
83	P	1,1,2,2-Tetrachloroethane	0.861	0.858	0.3	115	0.00	12.07

		Amount	Calc.	%Drift			
84	1,3,5-Trimethylbenzene	40.000	35.961	10.1	112	0.00	12.20
85	2-Chlorotoluene	40.000	36.906	7.7	114	0.00	12.19
86	trans-1,4-Dichloro-2-Bute	40.000	36.872	7.8	117	0.00	12.26

		AvgRF	CCRF	%Dev			
87	1,2,3-Trichloropropane	0.260	0.264	-1.5	114	0.00	12.23

Initial Calibration Verification

Job Number: FA19379 **Sample:** VO999-ICV999
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** O25952.D
Project: Melrose Air Force Range, NM

		Amount	Calc.	%Drift			
88	Cyclohexanone	200.000	178.947	10.5	110	0.00	12.30
89	4-Chlorotoluene	40.000	37.089	7.3	114	0.00	12.37
90	a-Methyl Styrene	40.000	0.221	99.4#	1	0.00	12.47
91	tert-Butylbenzene	40.000	34.943	12.6	108	0.00	12.55
92	1,2,4-Trimethylbenzene	40.000	36.293	9.3	112	0.00	12.63
93	Pentachloroethane	40.000	43.853	-9.6	156	0.00	12.60
94	sec-Butylbenzene	40.000	35.559	11.1	110	0.00	12.74
95	4-Isopropyltoluene	40.000	35.710	10.7	112	0.00	12.89

		AvgRF	CCRF	%Dev			
96	1,3-Dichlorobenzene	1.760	1.804	-2.5	114	0.00	13.01
97	1,4-Dichlorobenzene	2.045	2.010	1.7	113	0.00	13.10

		Amount	Calc.	%Drift			
98	n-Butylbenzene	40.000	39.505	1.2	112	0.00	13.36
99	Benzyl Chloride	40.000	41.207	-3.0	122	0.00	13.37

		AvgRF	CCRF	%Dev			
100	1,2-Dichlorobenzene	1.719	1.766	-2.7	114	0.00	13.57

		Amount	Calc.	%Drift			
101	1,2-Dibromo-3-Chloropropa	40.000	35.877	10.3	113	0.00	14.46
102	Hexachlorobutadiene	40.000	40.331	-0.8	113	0.00	15.18
103	1,2,4-Trichlorobenzene	40.000	36.297	9.3	115	0.00	15.22
104	Naphthalene	40.000	36.115	9.7	113	0.00	15.60
105	1,2,3-Trichlorobenzene	40.000	36.813	8.0	115	0.00	15.81

		AvgRF	CCRF	%Dev			
106 I	Tert Butyl Alcohol-d10	1.000	1.000	0.0	108	0.00	5.11

		Amount	Calc.	%Drift			
107	Ethanol	800.000	699.877	12.5	93	0.00	4.14

		AvgRF	CCRF	%Dev			
108	acrolein	2.972	2.868	3.5	107	0.00	4.57
109	Tert Butyl Alcohol	1.707	1.651	3.3	106	0.00	5.19

		Amount	Calc.	%Drift			
110	tert Amyl alcohol	400.000	389.290	2.7	117	0.00	7.32
111	Isobutyl alcohol	800.000	731.459	8.6	102	0.00	7.20
112	1,4-Dioxane	800.000	821.338	-2.7	119	0.00	8.40
113	3,3-Dimethyl-1-butanol	2000.000	1845.632	7.7	112	0.00	10.23

(#) = Out of Range SPCC's out = 0 CCC's out = 0
O25947.D msoNCOXY.m Tue Nov 04 14:46:53 2014

Southeast ACCUTEST LABORATORIES

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: FA19379
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP53670-MB	Q7791.D	1	10/27/14	NAF	10/27/14	OP53670	SQ261

The QC reported here applies to the following samples: **Method:** SW846 6850

FA19379-1

CAS No.	Compound	Result	RL	MDL	Units	Q
14797-73-0	Perchlorate	ND	0.20	0.040	ug/l	

Blank Spike Summary

Job Number: FA19379
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP53670-BS	Q7790.D	1	10/27/14	NAF	10/27/14	OP53670	SQ261

The QC reported here applies to the following samples: **Method:** SW846 6850

FA19379-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
14797-73-0	Perchlorate	0.2	0.17	85	80-120

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA19379
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP53670-MS	Q7805.D	1	10/27/14	NAF	10/27/14	OP53670	SQ261
OP53670-MSD	Q7806.D	1	10/27/14	NAF	10/27/14	OP53670	SQ261
MC34386-4F	Q7804.D	1	10/27/14	NAF	10/27/14	OP53670	SQ261

The QC reported here applies to the following samples: **Method:** SW846 6850

FA19379-1

CAS No.	Compound	MC34386-4F ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
14797-73-0	Perchlorate	0.20 U		0.2	0.20	100	0.2	0.18	90	11	80-120/15

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: FA19379
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Check Std:	SQ261-ICC261	**Injection Date:**	10/27/14
Lab File ID:	Q7782.D	**Injection Time:**	12:11
Instrument ID:	GCMSQ	**Method:**	SW846 6850

	IS 1 AREA	RT
Initial Cal [a]	37971	4.84
Check Std [b]	41541	4.84
Upper Limit [c]	56957	6.84
Lower Limit [d]	18986	2.84

Lab Sample ID	IS 1 AREA	RT
OP53670-BS	45518	4.85
OP53670-MB	44881	4.85
FA19379-1	33831	4.68
ZZZZZZ	45061	4.73
ZZZZZZ	44526	4.73

IS 1 = Cl18O4 (ISTD)

(a) Initial Cal is: SQ261-ICC261 Q7782.D 10/27/14 12:11. Area is AVERAGE of initial cal points.
(b) Check Std Limit = -50 to + 50% of initial cal area.
(c) Upper Limit = + 50% of initial standard area; Retention time + 2 minutes of check standard.
(d) Lower Limit = -50% of initial standard area; Retention time -2 minutes of check standard.

Semivolatile Internal Standard Area Summary

Job Number: FA19379
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Check Std:	SQ261-CC261	**Injection Date:**	10/27/14
Lab File ID:	Q7797.D	**Injection Time:**	14:58
Instrument ID:	GCMSQ	**Method:**	SW846 6850

	IS 1 AREA	RT
Initial Cal [a]	37971	4.84
Check Std [b]	44037	4.85
Upper Limit [c]	56957	6.85
Lower Limit [d]	18986	2.85

Lab Sample ID	IS 1 AREA	RT
ZZZZZZ	42542	4.74
ZZZZZZ	42816	4.79
ZZZZZZ	43937	4.80
ZZZZZZ	42779	4.78
MC34386-4F	43465	4.77
OP53670-MS	43037	4.77
OP53670-MSD	44173	4.77
ZZZZZZ	43343	4.80
ZZZZZZ	44107	4.86
ZZZZZZ	27762	4.71

IS 1 = Cl18O4 (ISTD)

(a) Initial Cal is: SQ261-ICC261 Q7782.D 10/27/14 12:11. Area is AVERAGE of initial cal points.
(b) Check Std Limit = -50 to + 50% of initial cal area.
(c) Upper Limit = + 50% of initial standard area; Retention time + 2 minutes of check standard.
(d) Lower Limit = -50% of initial standard area; Retention time -2 minutes of check standard.

Initial Calibration Summary

Job Number: FA19379
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM
Sample: SQ261-ICC261
Lab FileID: Q7782.D

Initial Calibration ReSponse Factors - D:\MassHunter\Data\1027_PER_SQ261\SQ261.batch.bin

Level ID : Calibration File
1 : D:\MassHunter\Data\1027_PER_SQ261\Q7779.d
2 : D:\MassHunter\Data\1027_PER_SQ261\Q7780.d
3 : D:\MassHunter\Data\1027_PER_SQ261\Q7781.d
4 : D:\MassHunter\Data\1027_PER_SQ261\Q7782.d
5 : D:\MassHunter\Data\1027_PER_SQ261\Q7783.d
6 : D:\MassHunter\Data\1027_PER_SQ261\Q7784.d
7 : D:\MassHunter\Data\1027_PER_SQ261\Q7785.d
8 : D:\MassHunter\Data\1027_PER_SQ261\Q7786.d

Compound	1	2	3	4	5	6	7	8	AvgRF	%RSD	r^2
1) Cl18O4	----------ISTD----------										
3) Perchlorate	1.1467	1.1531	1.1090	1.1561	1.2292	1.2518	1.3363	1.3343	1.2146	7.213	0.9998

*(value) - Average RF below (value)

Initial Calibration Verification

Job Number: FA19379
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM
Sample: SQ261-ICV261
Lab FileID: Q7787.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1027_PER_SQ261\SQ261.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1027_PER_SQ261\Q7779.d
2:D:\MassHunter\Data\1027_PER_SQ261\Q7780.d
3:D:\MassHunter\Data\1027_PER_SQ261\Q7781.d
4:D:\MassHunter\Data\1027_PER_SQ261\Q7782.d
5:D:\MassHunter\Data\1027_PER_SQ261\Q7783.d
6:D:\MassHunter\Data\1027_PER_SQ261\Q7784.d
7:D:\MassHunter\Data\1027_PER_SQ261\Q7785.d
8:D:\MassHunter\Data\1027_PER_SQ261\Q7786.d

Data File: Q7787
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	2.000	1.791	-10.4	89.6

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA19379 **Sample:** SQ261-CC261
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** Q7797.D
Project: Melrose Air Force Range, NM

Continuing Calibration Report

Batch: D:\MassHunter\Data\1027_PER_SQ261\SQ261.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1027_PER_SQ261\Q7779.d
2:D:\MassHunter\Data\1027_PER_SQ261\Q7780.d
3:D:\MassHunter\Data\1027_PER_SQ261\Q7781.d
4:D:\MassHunter\Data\1027_PER_SQ261\Q7782.d
5:D:\MassHunter\Data\1027_PER_SQ261\Q7783.d
6:D:\MassHunter\Data\1027_PER_SQ261\Q7784.d
7:D:\MassHunter\Data\1027_PER_SQ261\Q7785.d
8:D:\MassHunter\Data\1027_PER_SQ261\Q7786.d

Data File: Q7797
Type : QC
Level : 1

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	0.200	0.182	-8.9	91.1

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA19379 **Sample:** SQ261-CC261
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** Q7798.D
Project: Melrose Air Force Range, NM

Continuing Calibration Report

Batch: D:\MassHunter\Data\1027_PER_SQ261\SQ261.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1027_PER_SQ261\Q7779.d
2:D:\MassHunter\Data\1027_PER_SQ261\Q7780.d
3:D:\MassHunter\Data\1027_PER_SQ261\Q7781.d
4:D:\MassHunter\Data\1027_PER_SQ261\Q7782.d
5:D:\MassHunter\Data\1027_PER_SQ261\Q7783.d
6:D:\MassHunter\Data\1027_PER_SQ261\Q7784.d
7:D:\MassHunter\Data\1027_PER_SQ261\Q7785.d
8:D:\MassHunter\Data\1027_PER_SQ261\Q7786.d

Data File: Q7798
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	2.000	1.811	-9.4	90.6

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA19379 **Sample:** SQ261-CC261
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** Q7810.D
Project: Melrose Air Force Range, NM

Continuing Calibration Report

Batch: D:\MassHunter\Data\1027_PER_SQ261\SQ261.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1027_PER_SQ261\Q7779.d
2:D:\MassHunter\Data\1027_PER_SQ261\Q7780.d
3:D:\MassHunter\Data\1027_PER_SQ261\Q7781.d
4:D:\MassHunter\Data\1027_PER_SQ261\Q7782.d
5:D:\MassHunter\Data\1027_PER_SQ261\Q7783.d
6:D:\MassHunter\Data\1027_PER_SQ261\Q7784.d
7:D:\MassHunter\Data\1027_PER_SQ261\Q7785.d
8:D:\MassHunter\Data\1027_PER_SQ261\Q7786.d

Data File: Q7810
Type : QC
Level : 1

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	0.200	0.182	-9.1	90.9

CC Criteria: +/- 15%

Southeast ACCUTEST LABORATORIES

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: FA19379
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP53732-MB	BB044375.D	1	10/30/14	KL	10/30/14	OP53732	GBB1191

The QC reported here applies to the following samples: **Method:** SW846 8330A

FA19379-1

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	0.20	0.080	ug/l	
121-82-4	RDX	ND	0.20	0.085	ug/l	
99-65-0	1,3-Dinitrobenzene	ND	0.20	0.080	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.20	0.080	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.20	0.085	ug/l	
35572-78-2	2-amino-4,6-Dinitrotoluene	ND	0.20	0.080	ug/l	
19406-51-0	4-amino-2,6-Dinitrotoluene	ND	0.20	0.099	ug/l	
98-95-3	Nitrobenzene	ND	0.20	0.081	ug/l	
88-72-2	o-Nitrotoluene	ND	0.20	0.089	ug/l	
99-08-1	m-Nitrotoluene	ND	0.20	0.080	ug/l	
99-99-0	p-Nitrotoluene	ND	0.20	0.080	ug/l	
479-45-8	Tetryl	ND	0.20	0.080	ug/l	
99-35-4	1,3,5-Trinitrobenzene	ND	0.20	0.080	ug/l	
118-96-7	2,4,6-Trinitrotoluene	ND	0.20	0.080	ug/l	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	109%	70-136%

Method Blank Summary

Job Number: FA19379
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP53732-MB	GG057455.D	1	10/31/14	KL	10/30/14	OP53732	GGG2312

The QC reported here applies to the following samples: **Method:** SW846 8330A

FA19379-1

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	0.20	0.080	ug/l	
121-82-4	RDX	ND	0.20	0.085	ug/l	
99-65-0	1,3-Dinitrobenzene	ND	0.20	0.080	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.20	0.080	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.20	0.085	ug/l	
35572-78-2	2-amino-4,6-Dinitrotoluene	ND	0.20	0.080	ug/l	
19406-51-0	4-amino-2,6-Dinitrotoluene	ND	0.20	0.099	ug/l	
98-95-3	Nitrobenzene	ND	0.20	0.081	ug/l	
88-72-2	o-Nitrotoluene	ND	0.20	0.089	ug/l	
99-08-1	m-Nitrotoluene	ND	0.20	0.080	ug/l	
99-99-0	p-Nitrotoluene	ND	0.20	0.080	ug/l	
479-45-8	Tetryl	ND	0.20	0.080	ug/l	
99-35-4	1,3,5-Trinitrobenzene	ND	0.20	0.080	ug/l	
118-96-7	2,4,6-Trinitrotoluene	ND	0.20	0.080	ug/l	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	101%	70-136%

Blank Spike Summary

Job Number: FA19379
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP53732-BS	BB044374.D	1	10/30/14	KL	10/30/14	OP53732	GBB1191

The QC reported here applies to the following samples: **Method:** SW846 8330A

FA19379-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
2691-41-0	HMX	5	6.1	122	77-144
121-82-4	RDX	5	5.4	108	77-125
99-65-0	1,3-Dinitrobenzene	5	5.5	110	79-122
606-20-2	2,6-Dinitrotoluene	5	5.7	114	81-131
121-14-2	2,4-Dinitrotoluene	5	5.8	116	80-123
35572-78-2	2-amino-4,6-Dinitrotoluene	5	5.9	118	81-120
19406-51-0	4-amino-2,6-Dinitrotoluene	5	5.6	112	79-119
98-95-3	Nitrobenzene	5	5.9	118	78-130
88-72-2	o-Nitrotoluene	5	6.0	120	76-131
99-08-1	m-Nitrotoluene	5	5.6	112	78-122
99-99-0	p-Nitrotoluene	5	6.1	122	79-124
479-45-8	Tetryl	5	5.2	104	65-124
99-35-4	1,3,5-Trinitrobenzene	5	5.7	114	79-128
118-96-7	2,4,6-Trinitrotoluene	5	5.1	102	72-112

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	123%	70-136%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA19379
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP53732-MS	BB044386.D	1	10/30/14	KL	10/30/14	OP53732	GBB1191
OP53732-MSD	BB044387.D	1	10/30/14	KL	10/30/14	OP53732	GBB1191
FA19513-1 [a]	BB044385.D	1	10/30/14	KL	10/30/14	OP53732	GBB1191
FA19513-1 [b]	GG057458.D	1	10/31/14	KL	10/30/14	OP53732	GGG2312

The QC reported here applies to the following samples: **Method:** SW846 8330A

FA19379-1

CAS No.	Compound	FA19513-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
2691-41-0	HMX	0.19	U	9.62	8.4	87	9.62	10.7	111	24*	77-144/21
121-82-4	RDX	1.1		9.62	8.7	79	9.62	11.2	105	25*	77-125/19
99-65-0	1,3-Dinitrobenzene	0.19	U	9.62	7.0	73*	9.62	10	104	35*	79-122/17
606-20-2	2,6-Dinitrotoluene	0.19	U	9.62	6.9	72*	9.62	10.3	107	40*	81-131/17
121-14-2	2,4-Dinitrotoluene	0.19	U	9.62	7.0	73*	9.62	10.3	107	38*	80-123/19
35572-78-2	2-amino-4,6-Dinitrotoluene	0.19	U	9.62	7.6	79*	9.62	10.6	110	33*	81-120/19
19406-51-0	4-amino-2,6-Dinitrotoluene	0.19	U	9.62	7.3	76*	9.62	10.4	108	35*	79-119/20
98-95-3	Nitrobenzene	0.19	U	9.62	6.9	72*	9.62	10.2	106	39*	78-130/19
88-72-2	o-Nitrotoluene	0.19	U	9.62	6.5	68*	9.62	10.0	104	42*	76-131/20
99-08-1	m-Nitrotoluene	0.19	U	9.62	5.6	58*	9.62	9.3	97	50*	78-122/18
99-99-0	p-Nitrotoluene	0.19	U	9.62	6.3	66*	9.62	10.1	105	46*	79-124/18
479-45-8	Tetryl	0.19	U	9.62	6.7	70	9.62	9.3	97	33*	65-124/20
99-35-4	1,3,5-Trinitrobenzene	0.21		9.62	7.6	77*	9.62	10.7	109	34*	79-128/16
118-96-7	2,4,6-Trinitrotoluene	0.19	U	9.62	6.5	68*	9.62	9.1	95	33*	72-112/16

CAS No.	Surrogate Recoveries	MS	MSD	FA19513-1	FA19513-1	Limits
610-39-9	3,4-Dinitrotoluene	98%	110%	93%	85%	70-136%

(a) All hits confirmed by reanalysis on a dissimilar column.
(b) Confirmation run.

* = Outside of Control Limits.

Semivolatile Surrogate Recovery Summary

Job Number: FA19379
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Method: SW846 8330A **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
FA19379-1	BB044376.D	112
OP53732-BS	BB044374.D	123
OP53732-MB	BB044375.D	109
OP53732-MB	GG057455.D	101
OP53732-MS	BB044386.D	98
OP53732-MSD	BB044387.D	110

Surrogate Compounds	Recovery Limits
S1 = 3,4-Dinitrotoluene	70-136%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA19379
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Check Std:	GBB1191-CC1172	**Injection Date:**	10/30/14
Lab File ID:	BB044371.D	**Injection Time:**	13:59
Instrument ID:	GCBB	**Method:**	SW846 8330A

	S1 [a] **RT**
Check Std	10.89

Lab Sample ID	**Lab File ID**	**Date Analyzed**	**Time Analyzed**	**S1** [a] **RT**
FA19382-13	BB044373.D	10/30/14	14:53	10.87
OP53732-BS	BB044374.D	10/30/14	15:18	10.89
OP53732-MB	BB044375.D	10/30/14	15:43	10.89
FA19379-1	BB044376.D	10/30/14	16:08	10.89
ZZZZZZ	BB044377.D	10/30/14	16:33	10.89
ZZZZZZ	BB044378.D	10/30/14	16:58	10.89
ZZZZZZ	BB044379.D	10/30/14	17:23	10.88
ZZZZZZ	BB044380.D	10/30/14	17:48	10.88
ZZZZZZ	BB044381.D	10/30/14	18:13	10.89
ZZZZZZ	BB044382.D	10/30/14	18:38	10.89

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA19379
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Check Std:	GBB1191-CC1172	**Injection Date:**	10/30/14
Lab File ID:	BB044383.D	**Injection Time:**	19:03
Instrument ID:	GCBB	**Method:**	SW846 8330A

	S1 [a] RT	S1 [b] RT
Check Std	10.88	10.88

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
FA19513-1	BB044385.D	10/30/14	19:53		10.88
OP53732-MS	BB044386.D	10/30/14	20:18		10.89
OP53732-MSD	BB044387.D	10/30/14	20:43		10.87
OP53733-BS	BB044388.D	10/30/14	21:08	10.87	10.87
OP53733-MB	BB044389.D	10/30/14	21:33	10.88	10.88
GBB1191-ECC1172	BB044391.D	10/30/14	22:23	10.87	10.87

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA19379
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Check Std:	GGG2312-CC2305	**Injection Date:**	10/31/14
Lab File ID:	GG057452.D	**Injection Time:**	13:34
Instrument ID:	GCGG	**Method:**	SW846 8330A

	S1 [a] RT	S1 [b] RT
Check Std	16.17	16.18

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
OP53694-MB	GG057453.D	10/31/14	14:08		16.11
FA19382-13	GG057454.D	10/31/14	14:40		16.11
OP53732-MB	GG057455.D	10/31/14	15:12		16.14
ZZZZZZ	GG057456.D	10/31/14	15:44		16.14
ZZZZZZ	GG057457.D	10/31/14	16:16		16.10
FA19513-1	GG057458.D	10/31/14	16:48		16.12
ZZZZZZ	GG057459.D	10/31/14	17:20		16.13
GGG2312-ECC2305	GG057460.D	10/31/14	17:52	16.17	16.17

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

Initial Calibration Summary

Job Number: FA19379 **Sample:** GBB1172-ICC1172
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** BB043744.D
Project: Melrose Air Force Range, NM

Response Factor Report G1315B

Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Sep 23 13:42:29 2014
Response via : Initial Calibration

Calibration Files
20 =BB043740.D 50 =BB043741.D 100 =BB043742.D 200 =BB043743.D
500 =BB043744.D 1000=BB043745.D 2000=BB043746.D

	Compound	20	50	100	200	500	1000	2000	Avg		%RSD
1)	TNX	3.513	3.411	3.323	3.277	3.098	3.088	3.206	3.274	E3	4.80
2)	HMX	1.789	1.798	1.659	1.572	1.603	1.625	1.691	1.677	E3	5.26
3)	DNX	3.156	2.957	3.112	3.043	2.765	2.763	2.861	2.951	E3	5.43
4)	MNX	2.946	2.447	2.586	2.503	2.495	2.451	2.525	2.565	E3	6.80
5)	RDX	2.480	2.137	1.877	1.982	1.937	1.858	1.934	2.029	E3	10.78
6)	1,3,5-Trinitroben	4.328	4.571	4.513	4.152	4.133	4.053	4.201	4.279	E3	4.65
7)	1,3-Dinitrobenzen	6.515	5.747	5.847	5.611	5.516	5.379	5.567	5.740	E3	6.51
8)	3,5-Dinitroanilin	4.785	4.449	4.403	4.144	4.133	3.997	4.110	4.289	E3	6.37
9)	Nitrobenzene	3.091	3.396	3.439	3.132	3.066	3.032	3.080	3.176	E3	5.28
10)	Nitroglycerin								0.000		-1.00
11)	Tetryl	3.479	3.293	3.295	2.819	3.035	3.001	3.033	3.136	E3	7.21

---- Linear regr., Force(0,0) ---- Coefficient = 0.9999
Response Ratio = 0.00000 + 3025.97004 *A

12)	2,4,6-Trinitrotol	4.147	4.064	3.765	3.703	3.775	3.669	3.855	3.854	E3	4.75
13)	2-Amino-4,6-Dinit	3.568	3.397	3.096	3.114	3.220	3.182	3.340	3.274	E3	5.21
14)	4-Amino-2,6-Dinit	2.641	2.216	2.290	2.257	2.333	2.332	2.473	2.363	E3	6.23
15)S	3,4-Dinitrotoluen	2.008	1.900	1.750	2.032	2.131	2.124	2.234	2.026	E3	7.98
16)	2,4-Dinitrotoluen	3.963	5.521	4.885	4.766	4.655	4.577	4.748	4.731	E3	9.72
17)	2,6-Dinitrotoluen	2.954	3.185	2.857	2.807	2.687	2.640	2.748	2.840	E3	6.51
18)	o-Nitrotoluene	2.073	2.115	2.178	2.256	2.226	2.246	2.184	2.183	E3	3.12
19)	p-Nitrotoluene	2.601	3.524	3.483	3.505	3.398	3.385	3.408	3.329	E3	9.78
20)	m-Nitrotoluene	2.988	3.859	3.349	3.456	3.276	3.265	3.335	3.361	E3	7.81
21)	PETN								0.000		-1.00

Signal #2

1)	TNX	4.653	4.819	4.890	4.884	4.753	4.679	4.865	4.792	E3	2.05
2)	HMX	3.392	4.715	4.270	4.295	4.479	4.340	4.513	4.286	E3	9.88
3)	DNX	3.759	4.500	4.732	4.879	4.406	4.368	4.477	4.446	E3	7.96
4)	MNX	3.992	4.061	3.903	3.745	3.747	3.706	3.851	3.858	E3	3.50
5)	RDX	3.185	3.473	3.146	3.186	3.002	2.972	3.048	3.145	E3	5.36
6)	1,3,5-Trinitroben	8.183	8.257	8.239	7.940	7.927	7.832	8.156	8.076	E3	2.13
7)	1,3-Dinitrobenzen	3.950	3.825	3.857	4.016	3.793	3.763	3.837	3.863	E3	2.32
8)	3,5-Dinitroanilin	7.353	7.503	7.047	6.831	7.043	6.783	6.974	7.076	E3	3.73
9)	Nitrobenzene	3.378	3.640	3.341	3.017	3.102	2.991	3.022	3.213	E3	7.65
10)	Nitroglycerin	1.108	1.297	1.261	1.260	1.256	1.249	1.297	1.247	E3	5.16
11)	Tetryl	4.854	4.733	4.673	4.765	4.820	4.847	4.916	4.801	E3	1.71
12)	2,4,6-Trinitrotol	4.917	4.787	4.230	4.480	4.510	4.521	4.737	4.597	E3	5.02
13)	2-Amino-4,6-Dinit	5.786	4.451	4.632	4.679	4.766	4.879	5.097	4.898	E3	8.99
14)	4-Amino-2,6-Dinit	4.802	4.265	4.509	4.576	4.746	4.859	5.079	4.691	E3	5.66
15)S	3,4-Dinitrotoluen	3.778	2.870	3.540	3.658	3.799	3.892	4.091	3.661	E3	10.65
16)	2,4-Dinitrotoluen	3.491	2.985	3.024	3.174	3.086	3.090	3.216	3.152	E3	5.37
17)	2,6-Dinitrotoluen	4.200	2.999	3.597	3.657	3.539	3.563	3.696	3.607	E3	9.72
18)	o-Nitrotoluene	1.777	2.316	2.991	2.940	3.113	3.105	3.145	2.770	E3	18.88

---- Linear regr., Force(0,0) ---- Coefficient = 1.0000
Response Ratio = 0.00000 + 3133.74669 *A

Job Number: FA19379 **Sample:** GBB1172-ICC1172
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** BB043744.D
Project: Melrose Air Force Range, NM

```
19)  p-Nitrotoluene    1.121 2.956 2.826 2.840 2.878 2.908 2.943 2.639 E3  25.43
            ---- Linear regr., Force(0,0) ----  Coefficient =  0.9999
              Response Ratio = 0.00000 + 2932.09623 *A

20)  m-Nitrotoluene    3.985 4.064 4.138 4.077 3.994 4.004 4.083 4.049 E3   1.40
21)  PETN              1.506 1.518 1.473 1.464 1.452 1.430 1.452 1.471 E3   2.14
-------------------------------------------------------------------------------
(#) = Out of Range

          8330B.M           Tue Sep 23 14:14:45 2014
```

Initial Calibration Verification

Job Number: FA19379 **Sample:** GBB1172-ICV1172
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** BB043747.D
Project: Melrose Air Force Range, NM

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0923BPLB\BB043747.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\0923BPLB\BB043747.D\dad1A.ch
Acq On : 23-Sep-2014, 13:19:56 Operator: KISMETL
Sample : icv1172-500 Inst : G1315B
Misc : OP53136,GBB1172,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Tue Sep 23 13:42:29 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	500.000	475.841	4.8	101	0.00	1.10- 1.70
2	HMX	500.000	523.044	-4.6	109	0.00	1.21- 1.81
3	DNX	500.000	457.338	8.5	98	0.00	1.48- 2.08
4	MNX	500.000	465.512	6.9	96	0.00	2.07- 2.67
5	RDX	500.000	473.450	5.3	99	0.00	2.57- 3.37
6	1,3,5-Trinitrobenzene	500.000	506.366	-1.3	105	0.00	4.25- 5.05
7	1,3-Dinitrobenzene	500.000	475.241	5.0	99	0.00	5.50- 6.30
8	3,5-Dinitroaniline	500.000	491.533	1.7	102	0.00	5.95- 6.75
9	Nitrobenzene	500.000	512.204	-2.4	106	0.00	7.03- 7.83
10	Nitroglycerin	----------NA----------					

		Amount	Calc.	%Drift			
11	Tetryl	500.000	433.261	13.3	86	0.00	8.86- 9.66

		Amount	Calc.	%Drift			
12	2,4,6-Trinitrotoluene	500.000	427.794	14.4	87	0.00	9.29-10.09
13	2-Amino-4,6-Dinitrotol	500.000	512.127	-2.4	104	0.00	9.76-10.56
14	4-Amino-2,6-Dinitrotol	500.000	524.044	-4.8	106	0.00	10.19-10.99
15 S	3,4-Dinitrotoluene	----------NA----------					
16	2,4-Dinitrotoluene	500.000	512.558	-2.5	104	0.00	11.16-11.96
17	2,6-Dinitrotoluene	500.000	505.090	-1.0	107	0.00	11.55-12.35
18	o-Nitrotoluene	500.000	549.994	-10.0	108	0.00	13.85-14.72
19	p-Nitrotoluene	500.000	544.769	-9.0	107	0.00	14.12-15.12
20	m-Nitrotoluene	500.000	513.485	-2.7	105	0.00	14.69-15.69
21	PETN	----------NA----------					

***** Signal #2 *****

1	TNX	500.000	496.930	0.6	100	0.00	1.10- 1.70
2	HMX	500.000	560.337	-12.1	107	0.00	1.21- 1.81
3	DNX	500.000	489.289	2.1	99	0.00	1.48- 2.08
4	MNX	500.000	481.403	3.7	99	0.00	2.07- 2.67
5	RDX	500.000	480.962	3.8	101	0.00	2.57- 3.37
6	1,3,5-Trinitrobenzene	500.000	515.426	-3.1	105	0.00	4.25- 5.05
7	1,3-Dinitrobenzene	500.000	475.430	4.9	97	0.00	5.50- 6.30
8	3,5-Dinitroaniline	500.000	500.938	-0.2	101	0.00	5.94- 6.74
9	Nitrobenzene	500.000	498.741	0.3	103	0.00	7.03- 7.83
10	Nitroglycerin	2500.000	2490.571	0.4	99	0.00	8.51- 9.51
11	Tetryl	500.000	439.858	12.0	88	0.00	8.86- 9.66
12	2,4,6-Trinitrotoluene	500.000	466.670	6.7	95	0.00	9.29-10.09
13	2-Amino-4,6-Dinitrotol	500.000	533.915	-6.8	110	0.00	9.76-10.56

Initial Calibration Verification

Job Number: FA19379
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM
Sample: GBB1172-ICV1172
Lab FileID: BB043747.D

14	4-Amino-2,6-Dinitrotol	500.000	538.120	-7.6	106	0.00	10.19-10.99
15 S	3,4-Dinitrotoluene		----------NA----------				
16	2,4-Dinitrotoluene	500.000	502.939	-0.6	103	0.00	11.16-11.96
17	2,6-Dinitrotoluene	500.000	528.847	-5.8	108	0.00	11.56-12.36
	----------	Amount	Calc.	%Drift	----------		
18	o-Nitrotoluene	500.000	508.780	-1.8	102	0.00	13.72-14.72
19	p-Nitrotoluene	500.000	503.204	-0.6	103	0.00	14.12-15.12
	----------	Amount	Calc.	%Drift	----------		
20	m-Nitrotoluene	500.000	512.937	-2.6	104	0.00	14.69-15.69
21	PETN	2500.000	2506.628	-0.3	102	0.00	16.15-17.35

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB043744.D 8330B.M Tue Sep 23 14:15:16 2014

8.6.2

8

Continuing Calibration Summary

Job Number: FA19379 **Sample:** GBB1191-CC1172
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** BB044371.D
Project: Melrose Air Force Range, NM

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1030BPL\BB044371.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\1030BPL\BB044371.D\dad1A.ch
Acq On : 30-Oct-2014, 13:59:47 Operator: KISMETL
Sample : cc1172-1000 Inst : G1315B
Misc : OP53717,GBB1191,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Oct 30 06:31:39 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	968.324	3.2	103	0.00	1.10- 1.70
2	HMX	1000.000	977.845	2.2	101	0.00	1.22- 1.82
3	DNX	1000.000	960.392	4.0	103	0.00	1.49- 2.09
4	MNX	1000.000	979.183	2.1	102	0.00	2.08- 2.67
5	RDX	1000.000	935.894	6.4	102	0.00	2.58- 3.38
6	1,3,5-Trinitrobenzene	1000.000	960.898	3.9	101	0.00	4.25- 5.05
7	1,3-Dinitrobenzene	1000.000	958.298	4.2	102	0.00	5.51- 6.31
8	3,5-Dinitroaniline	1000.000	948.011	5.2	102	0.00	5.96- 6.76
9	Nitrobenzene	1000.000	949.012	5.1	99	0.00	7.04- 7.84
10	Nitroglycerin	----------	NA	----------			

	----------	Amount	Calc.	%Drift			
11	Tetryl	1000.000	984.906	1.5	99	0.00	8.89- 9.69

	----------	Amount	Calc.	%Drift			
12	2,4,6-Trinitrotoluene	1000.000	979.847	2.0	103	0.00	9.31-10.11
13	2-Amino-4,6-Dinitrotol	1000.000	1002.249	-0.2	103	0.00	9.79-10.59
14	4-Amino-2,6-Dinitrotol	1000.000	1040.057	-4.0	105	-0.01	10.23-11.03
15 S	3,4-Dinitrotoluene	1000.000	1038.659	-3.9	99	0.00	10.50-11.30
16	2,4-Dinitrotoluene	1000.000	996.031	0.4	103	0.00	11.18-11.98
17	2,6-Dinitrotoluene	1000.000	956.914	4.3	103	0.00	11.57-12.37
18	o-Nitrotoluene	1000.000	978.849	2.1	95	0.00	13.86-14.74
19	p-Nitrotoluene	1000.000	998.599	0.1	98	0.00	14.13-15.13
20	m-Nitrotoluene	1000.000	945.162	5.5	97	0.00	14.71-15.71
21	PETN	----------	NA	----------			

***** Signal #2 *****

1	TNX	1000.000	1003.411	-0.3	103	0.00	1.10- 1.70
2	HMX	1000.000	1053.990	-5.4	104	0.00	1.22- 1.82
3	DNX	1000.000	1009.223	-0.9	103	0.00	1.49- 2.09
4	MNX	1000.000	992.056	0.8	103	0.00	2.07- 2.67
5	RDX	1000.000	959.625	4.0	102	0.00	2.58- 3.38
6	1,3,5-Trinitrobenzene	1000.000	987.541	1.2	102	0.00	4.25- 5.05
7	1,3-Dinitrobenzene	1000.000	965.586	3.4	99	0.00	5.51- 6.31
8	3,5-Dinitroaniline	1000.000	965.553	3.4	101	0.00	5.96- 6.76
9	Nitrobenzene	1000.000	920.758	7.9	99	0.00	7.04- 7.84
10	Nitroglycerin	5000.000	5137.291	-2.7	103	0.00	8.52- 9.52
11	Tetryl	1000.000	989.970	1.0	98	0.00	8.89- 9.69
12	2,4,6-Trinitrotoluene	1000.000	1010.518	-1.1	103	0.00	9.31-10.11
13	2-Amino-4,6-Dinitrotol	1000.000	1021.456	-2.1	103	-0.01	9.79-10.59

Continuing Calibration Summary

Job Number: FA19379
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Sample: GBB1191-CC1172
Lab FileID: BB044371.D

14	4-Amino-2,6-Dinitrotol	1000.000	1080.448	-8.0	104	0.00	10.23-11.03
15 S	3,4-Dinitrotoluene	1000.000	1045.313	-4.5	98	0.00	10.50-11.30
16	2,4-Dinitrotoluene	1000.000	998.737	0.1	102	0.00	11.18-11.98
17	2,6-Dinitrotoluene	1000.000	986.216	1.4	100	0.00	11.58-12.38

		Amount	Calc.	%Drift			
18	o-Nitrotoluene	1000.000	971.597	2.8	98	0.00	13.74-14.74
19	p-Nitrotoluene	1000.000	959.112	4.1	97	0.00	14.14-15.14

		Amount	Calc.	%Drift			
20	m-Nitrotoluene	1000.000	966.741	3.3	98	0.00	14.71-15.71
21	PETN	5000.000	4594.098	8.1	95	0.00	16.16-17.36

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB043745.D 8330B.M Fri Oct 31 07:44:49 2014

8.6.3

8

Continuing Calibration Summary

Job Number: FA19379 **Sample:** GBB1191-CC1172
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** BB044383.D
Project: Melrose Air Force Range, NM

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1030BPL\BB044383.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\1030BPL\BB044383.D\dad1A.ch
Acq On : 30-Oct-2014, 19:03:27 Operator: KISMETL
Sample : cc1172-1000 Inst : G1315B
Misc : OP53717,GBB1191,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Oct 30 06:31:39 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	965.161	3.5	102	0.00	1.10- 1.70
2	HMX	1000.000	959.006	4.1	99	0.00	1.22- 1.82
3	DNX	1000.000	953.374	4.7	102	0.00	1.49- 2.09
4	MNX	1000.000	960.228	4.0	100	0.00	2.08- 2.67
5	RDX	1000.000	937.324	6.3	102	0.00	2.58- 3.38
6	1,3,5-Trinitrobenzene	1000.000	958.870	4.1	101	0.00	4.25- 5.05
7	1,3-Dinitrobenzene	1000.000	958.989	4.1	102	0.00	5.51- 6.31
8	3,5-Dinitroaniline	1000.000	935.283	6.5	100	-0.01	5.96- 6.76
9	Nitrobenzene	1000.000	949.296	5.1	99	0.00	7.04- 7.84
10	Nitroglycerin	----------	NA	----------			
	----------	Amount	Calc.	%Drift			
11	Tetryl	1000.000	979.804	2.0	99	-0.01	8.89- 9.69
	----------	Amount	Calc.	%Drift			
12	2,4,6-Trinitrotoluene	1000.000	975.057	2.5	102	-0.01	9.31-10.11
13	2-Amino-4,6-Dinitrotol	1000.000	995.166	0.5	102	-0.02	9.79-10.59
14	4-Amino-2,6-Dinitrotol	1000.000	1033.113	-3.3	105	-0.02	10.23-11.03
15 S	3,4-Dinitrotoluene	1000.000	1028.206	-2.8	98	-0.01	10.50-11.30
16	2,4-Dinitrotoluene	1000.000	987.290	1.3	102	-0.01	11.18-11.98
17	2,6-Dinitrotoluene	1000.000	931.593	6.8	100	0.00	11.57-12.37
18	o-Nitrotoluene	1000.000	978.919	2.1	95	0.00	13.86-14.74
19	p-Nitrotoluene	1000.000	1002.034	-0.2	99	0.00	14.13-15.13
20	m-Nitrotoluene	1000.000	969.510	3.0	100	0.00	14.71-15.71
21	PETN	----------	NA	----------			
*****	Signal #2 *****						
1	TNX	1000.000	1002.572	-0.3	103	0.00	1.10- 1.70
2	HMX	1000.000	1045.315	-4.5	103	0.00	1.22- 1.82
3	DNX	1000.000	1006.989	-0.7	103	0.00	1.49- 2.09
4	MNX	1000.000	985.885	1.4	103	0.00	2.07- 2.67
5	RDX	1000.000	954.841	4.5	101	0.00	2.58- 3.38
6	1,3,5-Trinitrobenzene	1000.000	980.164	2.0	101	0.00	4.25- 5.05
7	1,3-Dinitrobenzene	1000.000	963.679	3.6	99	0.00	5.51- 6.31
8	3,5-Dinitroaniline	1000.000	956.709	4.3	100	-0.02	5.96- 6.76
9	Nitrobenzene	1000.000	917.020	8.3	99	0.00	7.04- 7.84
10	Nitroglycerin	5000.000	5051.913	-1.0	101	-0.01	8.52- 9.52
11	Tetryl	1000.000	961.682	3.8	95	-0.02	8.89- 9.69
12	2,4,6-Trinitrotoluene	1000.000	964.261	3.6	98	-0.01	9.31-10.11
13	2-Amino-4,6-Dinitrotol	1000.000	985.380	1.5	99	-0.02	9.79-10.59

Continuing Calibration Summary

Job Number: FA19379
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Sample: GBB1191-CC1172
Lab FileID: BB044383.D

14	4-Amino-2,6-Dinitrotol	1000.000	1055.908	-5.6	102	-0.02	10.23-11.03
15 S	3,4-Dinitrotoluene	1000.000	1024.683	-2.5	96	-0.01	10.50-11.30
16	2,4-Dinitrotoluene	1000.000	1014.907	-1.5	104	-0.01	11.18-11.98
17	2,6-Dinitrotoluene	1000.000	1006.935	-0.7	102	-0.01	11.58-12.38
		Amount	Calc.	%Drift			
18	o-Nitrotoluene	1000.000	954.173	4.6	96	0.00	13.74-14.74
19	p-Nitrotoluene	1000.000	960.430	4.0	97	0.00	14.14-15.14
		Amount	Calc.	%Drift			
20	m-Nitrotoluene	1000.000	984.497	1.6	100	0.00	14.71-15.71
21	PETN	5000.000	4761.717	4.8	98	0.00	16.16-17.36

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB043745.D 8330B.M Fri Oct 31 07:44:50 2014

8.6.4

8

Continuing Calibration Summary

Job Number: FA19379 **Sample:** GBB1191-ECC1172
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** BB044391.D
Project: Melrose Air Force Range, NM

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1030BPL\BB044391.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\1030BPL\BB044391.D\dad1A.ch
Acq On : 30-Oct-2014, 22:23:11 Operator: KISMETL
Sample : ECC1172-1000 Inst : G1315B
Misc : OP53717,GBB1191,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Thu Oct 30 06:31:39 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	958.963	4.1	102	0.00	1.10- 1.70
2	HMX	1000.000	961.735	3.8	99	0.00	1.22- 1.82
3	DNX	1000.000	947.893	5.2	101	0.00	1.49- 2.09
4	MNX	1000.000	961.167	3.9	101	0.00	2.08- 2.67
5	RDX	1000.000	932.326	6.8	102	0.00	2.58- 3.38
6	1,3,5-Trinitrobenzene	1000.000	958.378	4.2	101	-0.01	4.25- 5.05
7	1,3-Dinitrobenzene	1000.000	954.705	4.5	102	-0.01	5.51- 6.31
8	3,5-Dinitroaniline	1000.000	935.931	6.4	100	-0.02	5.96- 6.76
9	Nitrobenzene	1000.000	944.731	5.5	99	-0.01	7.04- 7.84
10	Nitroglycerin			----------NA----------			

		Amount	Calc.	%Drift			
11	Tetryl	1000.000	972.963	2.7	98	-0.03	8.89- 9.69

		Amount	Calc.	%Drift			
12	2,4,6-Trinitrotoluene	1000.000	971.986	2.8	102	-0.03	9.31-10.11
13	2-Amino-4,6-Dinitrotol	1000.000	988.122	1.2	102	-0.03	9.79-10.59
14	4-Amino-2,6-Dinitrotol	1000.000	1031.060	-3.1	104	-0.03	10.23-11.03
15 S	3,4-Dinitrotoluene	1000.000	1018.924	-1.9	97	-0.03	10.50-11.30
16	2,4-Dinitrotoluene	1000.000	987.115	1.3	102	-0.03	11.18-11.98
17	2,6-Dinitrotoluene	1000.000	941.598	5.8	101	-0.03	11.57-12.37
18	o-Nitrotoluene	1000.000	990.472	1.0	96	-0.01	13.86-14.74
19	p-Nitrotoluene	1000.000	1005.604	-0.6	99	-0.01	14.13-15.13
20	m-Nitrotoluene	1000.000	970.780	2.9	100	-0.01	14.71-15.71
21	PETN			----------NA----------			

***** Signal #2 *****

1	TNX	1000.000	994.964	0.5	102	0.00	1.10- 1.70
2	HMX	1000.000	1040.467	-4.0	103	0.00	1.22- 1.82
3	DNX	1000.000	1001.431	-0.1	102	0.00	1.49- 2.09
4	MNX	1000.000	978.227	2.2	102	0.00	2.07- 2.67
5	RDX	1000.000	946.666	5.3	100	0.00	2.58- 3.38
6	1,3,5-Trinitrobenzene	1000.000	977.333	2.3	101	-0.01	4.25- 5.05
7	1,3-Dinitrobenzene	1000.000	982.248	1.8	101	-0.01	5.51- 6.31
8	3,5-Dinitroaniline	1000.000	956.329	4.4	100	-0.02	5.96- 6.76
9	Nitrobenzene	1000.000	918.899	8.1	99	-0.01	7.04- 7.84
10	Nitroglycerin	5000.000	5096.937	-1.9	102	-0.03	8.52- 9.52
11	Tetryl	1000.000	978.974	2.1	97	-0.03	8.89- 9.69
12	2,4,6-Trinitrotoluene	1000.000	1002.565	-0.3	102	-0.03	9.31-10.11
13	2-Amino-4,6-Dinitrotol	1000.000	1007.876	-0.8	101	-0.04	9.79-10.59

8.6.5

8

Continuing Calibration Summary

Job Number: FA19379
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Sample: GBB1191-ECC1172
Lab FileID: BB044391.D

14	4-Amino-2,6-Dinitrotol	1000.000	1068.600	-6.9	103	-0.03	10.23-11.03
15 S	3,4-Dinitrotoluene	1000.000	1025.556	-2.6	96	-0.03	10.50-11.30
16	2,4-Dinitrotoluene	1000.000	987.784	1.2	101	-0.03	11.18-11.98
17	2,6-Dinitrotoluene	1000.000	971.707	2.8	98	-0.03	11.58-12.38

		Amount	Calc.	%Drift			
18	o-Nitrotoluene	1000.000	955.263	4.5	96	-0.02	13.74-14.74
19	p-Nitrotoluene	1000.000	963.148	3.7	97	-0.01	14.14-15.14

		Amount	Calc.	%Drift			
20	m-Nitrotoluene	1000.000	971.143	2.9	98	-0.01	14.71-15.71
21	PETN	5000.000	4695.096	6.1	97	-0.02	16.16-17.36

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB043745.D 8330B.M Fri Oct 31 07:45:11 2014

8.6.5

8

Initial Calibration Summary

Job Number: FA19379 **Sample:** GGG2305-ICC2305
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** GG057226.D
Project: Melrose Air Force Range, NM

Response Factor Report G1315B

Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Tue Oct 21 09:10:37 2014
Response via : Initial Calibration

Calibration Files
20 =GG057222.D 50 =GG057223.D 100 =GG057224.D 200 =GG057225.D
500 =GG057226.D 1000=GG057227.D 2000=GG057228.D

	Compound	20	50	100	200	500	1000	2000	Avg	%RSD
1)	TNX	9.175	9.868	9.292	8.995	8.817	8.591	8.926	9.095 E3	4.51
2)	HMX	3.697	3.472	3.013	2.875	2.771	2.719	2.858	3.058 E3	12.33
3)	DNX	9.902	9.413	8.899	8.705	8.460	8.250	8.559	8.884 E3	6.56
4)	MNX	6.368	6.678	6.386	6.408	6.337	6.254	6.527	6.423 E3	2.17
5)	1,3,5-Trinitroben	1.102	1.149	1.088	1.084	1.058	1.039	1.086	1.087 E4	3.17
6)	RDX	5.286	5.251	5.001	4.988	4.858	4.754	4.968	5.015 E3	3.86
7)	1,3-Dinitrobenzen	1.530	1.544	1.498	1.496	1.456	1.430	1.497	1.493 E4	2.64
8)	Nitrobenzene	9.647	9.372	9.051	9.093	8.922	8.729	9.133	9.135 E3	3.28
9)	2,4,6-Trinitrotol	1.044	1.055	1.006	1.021	0.998	0.980	1.024	1.018 E4	2.57
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
	Response Ratio = 0.00000 + 9622.13818 *A + 0.30288 *A^2									
10)	Nitroglycerin								0.000	-1.00
11)	Tetryl	8.342	7.804	7.680	7.765	7.707	7.544	7.898	7.820 E3	3.26
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
	Response Ratio = 0.00000 + 7398.81315 *A + 0.24478 *A^2									
12)S	3,4-Dinitrotoluen	6.560	6.204	6.077	6.020	5.943	5.824	6.083	6.102 E3	3.84
13)	2,6-Dinitrotoluen	7.465	7.189	6.877	6.895	6.780	6.649	6.946	6.972 E3	3.92
14)	2,4-Dinitrotoluen	1.419	1.356	1.308	1.303	1.290	1.263	1.322	1.323 E4	3.85
15)	o-Nitrotoluene	1.712	1.764	1.707	1.684	1.665	1.632	1.708	1.696 E4	2.44
16)	3,5-Dinitroanilin	1.712	1.764	1.707	1.684	1.665	1.632	1.708	1.696 E4	2.44
17)	p-Nitrotoluene	5.330	5.348	5.157	4.935	4.919	4.791	5.027	5.072 E3	4.21
18)	4-Amino-2,6-Dinit	7.034	7.682	7.249	6.981	6.864	6.732	7.032	7.082 E3	4.36
19)	m-Nitrotoluene	6.697	6.842	6.600	6.439	6.306	6.153	6.453	6.499 E3	3.61
20)	2-Amino-4,6-Dinit	9.344	9.672	9.475	9.431	9.317	9.171	9.632	9.435 E3	1.88
21)	PETN								0.000	-1.00

Signal #2

1)	TNX	1.382	1.477	1.383	1.364	1.315	1.302	1.349	1.367 E4	4.19
2)	HMX	1.694	1.489	1.230	1.121	1.031	1.002	1.035	1.229 E4	21.62
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9995									
	Response Ratio = 0.00000 + 10297.81097 *A									
3)	DNX	1.687	1.813	1.555	1.433	1.331	1.294	1.329	1.492 E4	13.41
4)	MNX	1.067	1.110	1.038	1.034	1.009	0.996	1.038	1.042 E4	3.63
5)	1,3,5-Trinitroben	1.818	1.938	1.875	1.897	1.886	1.868	1.952	1.891 E4	2.39
6)	RDX	9.146	8.766	8.901	9.117	9.233	9.209	9.687	9.151 E3	3.19
7)	1,3-Dinitrobenzen	1.032	1.153	1.171	1.154	1.098	1.080	1.132	1.117 E4	4.44
8)	Nitrobenzene	8.617	8.979	9.662	8.924	8.350	8.111	8.442	8.726 E3	5.90
9)	2,4,6-Trinitrotol	1.281	1.457	1.479	1.397	1.334	1.304	1.356	1.373 E4	5.48
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9998									
	Response Ratio = 0.00000 + 12950.05398 *A + 0.29473 *A^2									
10)	Nitroglycerin	3.656	3.622	3.729	3.586	3.480	3.393	3.533	3.571 E3	3.16
11)	Tetryl	1.377	1.496	1.464	1.391	1.366	1.333	1.394	1.403 E4	4.07

Initial Calibration Summary

Job Number: FA19379
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM
Sample: GGG2305-ICC2305
Lab FileID: GG057226.D

```
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9999
              Response Ratio = 0.00000 + 13153.71214 *A + 0.38154 *A^2

12)S 3,4-Dinitrotoluen 1.225 1.207 1.254 1.209 1.188 1.153 1.206 1.206 E4   2.58
13)  2,6-Dinitrotoluen 1.098 1.133 1.060 1.032 1.003 0.975 1.019 1.046 E4   5.30
14)  2,4-Dinitrotoluen 1.019 1.082 1.009 0.982 0.974 0.925 0.972 0.995 E4   4.92
15)  o-Nitrotoluene    3.540 2.935 2.881 2.878 2.776 2.708 2.820 2.934 E4   9.46
16)  3,5-Dinitroanilin 3.540 2.935 2.881 2.969 2.776 2.708 2.820 2.947 E4   9.39
17)  p-Nitrotoluene    7.761 8.542 9.444 9.444 8.783 8.423 8.596 8.714 E3   6.80
18)  4-Amino-2,6-Dinit 1.227 1.397 1.449 1.554 1.433 1.400 1.442 1.415 E4   6.92
19)  m-Nitrotoluene    1.047 1.092 1.121 1.252 1.086 1.079 1.108 1.112 E4   5.93
20)  2-Amino-4,6-Dinit 1.054 1.230 1.234 1.267 1.318 1.325 1.401 1.261 E4   8.66
21)  PETN              1.826 1.937 1.740 2.400 2.208 2.025 2.232 2.052 E3  11.61
-------------------------------------------------------------------------------
(#) = Out of Range

          8330_RPB2.M        Tue Oct 21 09:34:48 2014
```

8.9.6

8

Initial Calibration Verification

Job Number: FA19379
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM
Sample: GGG2305-ICV2305
Lab FileID: GG057229.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\1020RPB2\GG057229.D\dad1B.ch Vial: 9
Signal #2 : G:\DATA\1020RPB2\GG057229.D\dad1A.ch
Acq On : 20-Oct-2014, 15:05:08 Operator: kismetl
Sample : icv2305-500 Inst : G1315B
Misc : OP53491,GGG2305,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Tue Oct 21 09:10:37 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	500.000	457.807	8.4	94	0.00	5.13- 6.13
2	HMX	500.000	480.034	4.0	106	0.00	5.72- 6.72
3	DNX	500.000	443.901	11.2	93	-0.01	5.87- 6.87
4	MNX	500.000	463.128	7.4	94	0.00	7.22- 8.22
5	1,3,5-Trinitrobenzene	500.000	486.061	2.8	100	0.00	8.15- 9.15
6	RDX	500.000	474.575	5.1	98	-0.02	8.71- 9.71
7	1,3-Dinitrobenzene	500.000	471.735	5.7	97	0.00	10.76-11.76
8	Nitrobenzene	500.000	510.051	-2.0	104	0.00	11.73-12.73
		Amount	Calc.	%Drift			
9	2,4,6-Trinitrotoluene	500.000	410.259	17.9#	80	0.00	12.82-13.82
		Amount	Calc.	%Drift			
10	Nitroglycerin			NA			
		Amount	Calc.	%Drift			
11	Tetryl	500.000	414.068	17.2#	81	0.02	14.50-15.50
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene			NA			
13	2,6-Dinitrotoluene	500.000	541.704	-8.3	111	-0.03	16.07-17.07
14	2,4-Dinitrotoluene	500.000	480.472	3.9	99	0.00	16.85-17.85
15	o-Nitrotoluene	500.000	510.905	-2.2	104	-0.01	18.47-19.47
16	3,5-Dinitroaniline	500.000	510.905	-2.2	104	-0.01	18.47-19.47
17	p-Nitrotoluene	500.000	511.542	-2.3	105	-0.03	19.89-20.89
18	4-Amino-2,6-Dinitrotol	500.000	456.594	8.7	94	0.00	20.49-21.49
19	m-Nitrotoluene	500.000	493.049	1.4	102	-0.03	21.41-22.41
20	2-Amino-4,6-Dinitrotol	500.000	491.714	1.7	100	-0.04	23.16-24.16
21	PETN			NA			
*****	Signal #2 *****						
1	TNX	500.000	451.790	9.6	94	0.00	5.13- 6.13
		Amount	Calc.	%Drift			
2	HMX	500.000	558.672	-11.7	112	0.00	5.72- 6.72
		Amount	Calc.	%Drift			
3	DNX	500.000	415.134	17.0#	93	0.00	5.86- 6.86
4	MNX	500.000	454.442	9.1	94	0.00	7.22- 8.22
5	1,3,5-Trinitrobenzene	500.000	498.642	0.3	100	0.00	8.15- 9.15

8.6.7

8

Initial Calibration Verification

Job Number: FA19379
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM
Sample: GGG2305-ICV2305
Lab FileID: GG057229.D

		Amount	Calc.	%Drift			
6	RDX	500.000	498.515	0.3	99	-0.01	8.71- 9.71
7	1,3-Dinitrobenzene	500.000	479.569	4.1	98	0.00	10.76-11.76
8	Nitrobenzene	500.000	490.357	1.9	102	-0.02	11.74-12.74
		Amount	Calc.	%Drift			
9	2,4,6-Trinitrotoluene	500.000	405.029	19.0#	79	0.00	12.81-13.81
		Amount	Calc.	%Drift			
10	Nitroglycerin	2500.000	2304.743	7.8	95	0.00	13.68-14.68
		Amount	Calc.	%Drift			
11	Tetryl	500.000	432.939	13.4	84	0.02	14.49-15.49
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene	----------NA----------					
13	2,6-Dinitrotoluene	500.000	570.030	-14.0	119	-0.04	16.08-17.08
14	2,4-Dinitrotoluene	500.000	452.785	9.4	92	-0.02	16.86-17.86
15	o-Nitrotoluene	500.000	476.156	4.8	101	-0.01	18.47-19.47
16	3,5-Dinitroaniline	500.000	471.950	5.6	100	-0.01	18.47-19.47
17	p-Nitrotoluene	500.000	476.559	4.7	95	-0.03	19.89-20.89
18	4-Amino-2,6-Dinitrotol	500.000	440.344	11.9	87	0.00	20.49-21.49
19	m-Nitrotoluene	500.000	492.202	1.6	101	-0.02	21.41-22.41
20	2-Amino-4,6-Dinitrotol	500.000	526.397	-5.3	101	-0.03	23.15-24.15
21	PETN	2500.000	4322.209	-72.9#	161	-0.02	25.09-26.09

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG057226.D 8330_RPB2.M Tue Oct 21 09:35:08 2014

8.6.7 8

Initial Calibration Verification

Job Number: FA19379 **Sample:** GGG2308-ICV2305
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** GG057321.D
Project: Melrose Air Force Range, NM

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\1023RPB3\GG057321.D\dad1B.ch Vial: 71
Signal #2 : G:\DATA\1023RPB3\GG057321.D\dad1A.ch
Acq On : 24-Oct-2014, 16:14:58 Operator: kismetl
Sample : icv2305-500 Inst : G1315B
Misc : OP53620,GGG2308,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Mon Oct 27 05:32:46 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	500.000	456.656	8.7	94	0.00	5.15- 6.15
2	HMX	500.000	538.465	-7.7	119	0.01	5.76- 6.76
3	DNX	500.000	430.842	13.8	90	-0.01	5.89- 6.89
4	MNX	500.000	466.166	6.8	94	0.00	7.25- 8.25
5	1,3,5-Trinitrobenzene	500.000	497.711	0.5	102	0.00	8.17- 9.17
6	RDX	500.000	485.391	2.9	100	-0.01	8.77- 9.77
7	1,3-Dinitrobenzene	500.000	482.659	3.5	99	-0.02	10.84-11.84
8	Nitrobenzene	500.000	521.106	-4.2	107	-0.04	11.84-12.84
		Amount	Calc.	%Drift			
9	2,4,6-Trinitrotoluene	500.000	447.408	10.5	87	-0.04	12.95-13.95
		Amount	Calc.	%Drift			
10	Nitroglycerin			NA			
		Amount	Calc.	%Drift			
11	Tetryl	500.000	493.976	1.2	96	-0.06	14.74-15.74
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene			NA			
13	2,6-Dinitrotoluene	500.000	529.204	-5.8	109	-0.07	16.29-17.29
14	2,4-Dinitrotoluene	500.000	492.814	1.4	101	-0.07	17.10-18.10
15	o-Nitrotoluene	500.000	510.090	-2.0	104	-0.07	18.76-19.76
16	3,5-Dinitroaniline	500.000	510.090	-2.0	104	-0.07	18.76-19.76
17	p-Nitrotoluene	500.000	520.026	-4.0	107	-0.12	20.22-21.22
18	4-Amino-2,6-Dinitrotol	500.000	469.743	6.1	97	-0.11	20.92-21.92
19	m-Nitrotoluene	500.000	502.159	-0.4	103	-0.13	21.81-22.81
20	2-Amino-4,6-Dinitrotol	500.000	498.020	0.4	101	-0.12	23.62-24.62
21	PETN			NA			
*****	Signal #2 *****						
1	TNX	500.000	459.276	8.1	95	0.00	5.15- 6.15
		Amount	Calc.	%Drift			
2	HMX	500.000	573.859	-14.8	115	0.00	5.75- 6.75
		Amount	Calc.	%Drift			
3	DNX	500.000	419.834	16.0#	94	-0.01	5.89- 6.89
4	MNX	500.000	453.311	9.3	94	0.00	7.25- 8.25
5	1,3,5-Trinitrobenzene	500.000	507.632	-1.5	102	0.00	8.17- 9.17

8.6.8

8

Initial Calibration Verification

Job Number: FA19379
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM
Sample: GGG2308-ICV2305
Lab FileID: GG057321.D

		Amount	Calc.	%Drift			
6	RDX	500.000	501.877	-0.4	99	-0.01	8.77- 9.77
7	1,3-Dinitrobenzene	500.000	492.185	1.6	100	-0.02	10.84-11.84
8	Nitrobenzene	500.000	525.759	-5.2	110	-0.04	11.84-12.84
		Amount	Calc.	%Drift			
9	2,4,6-Trinitrotoluene	500.000	448.320	10.3	88	-0.04	12.95-13.95
		Amount	Calc.	%Drift			
10	Nitroglycerin	2500.000	2341.884	6.3	96	-0.05	13.86-14.86
		Amount	Calc.	%Drift			
11	Tetryl	500.000	493.796	1.2	96	-0.06	14.74-15.74
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene			NA			
13	2,6-Dinitrotoluene	500.000	559.549	-11.9	117	-0.07	16.29-17.29
14	2,4-Dinitrotoluene	500.000	533.194	-6.6	109	-0.08	17.11-18.11
15	o-Nitrotoluene	500.000	497.217	0.6	105	-0.07	18.76-19.76
16	3,5-Dinitroaniline	500.000	495.031	1.0	105	-0.07	18.76-19.76
17	p-Nitrotoluene	500.000	533.377	-6.7	106	-0.12	20.23-21.23
18	4-Amino-2,6-Dinitrotol	500.000	486.517	2.7	96	-0.11	20.92-21.92
19	m-Nitrotoluene	500.000	505.473	-1.1	104	-0.14	21.81-22.81
20	2-Amino-4,6-Dinitrotol	500.000	528.161	-5.6	101	-0.11	23.62-24.62
21	PETN	2500.000	4537.526	-81.5#	169	-0.10	25.46-26.46

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG057226.D 8330_RPB2.M Mon Oct 27 13:16:52 2014

8.6.8

Continuing Calibration Summary

Job Number: FA19379 **Sample:** GGG2312-CC2305
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** GG057452.D
Project: Melrose Air Force Range, NM

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\1031RPB2\GG057452.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\1031RPB2\GG057452.D\dad1A.ch
Acq On : 31-Oct-2014, 13:34:35 Operator: kismetl
Sample : cc2305-1000 Inst : G1315B
Misc : OP53732,GGG2312,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Tue Oct 28 07:15:30 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	955.439	4.5	101	0.00	5.14- 6.14
2	HMX	1000.000	931.436	6.9	105	0.00	5.76- 6.76
3	DNX	1000.000	909.766	9.0	98	0.00	5.88- 6.88
4	MNX	1000.000	982.329	1.8	101	-0.01	7.24- 8.24
5	1,3,5-Trinitrobenzene	1000.000	956.772	4.3	100	-0.02	8.17- 9.17
6	RDX	1000.000	953.855	4.6	101	-0.02	8.74- 9.74
7	1,3-Dinitrobenzene	1000.000	965.121	3.5	101	-0.03	10.80-11.80
8	Nitrobenzene	1000.000	970.236	3.0	102	-0.04	11.77-12.77
	----------	Amount	Calc.	%Drift			----------
9	2,4,6-Trinitrotoluene	1000.000	990.176	1.0	100	-0.03	12.87-13.87
	----------	Amount	Calc.	%Drift			----------
10	Nitroglycerin		----------	NA	----------		
	----------	Amount	Calc.	%Drift			----------
11	Tetryl	1000.000	976.271	2.4	99	-0.02	14.59-15.59
	----------	Amount	Calc.	%Drift			----------
12 S	3,4-Dinitrotoluene	1000.000	967.094	3.3	101	-0.03	15.71-16.71
13	2,6-Dinitrotoluene	1000.000	961.243	3.9	101	-0.03	16.12-17.12
14	2,4-Dinitrotoluene	1000.000	964.486	3.6	101	-0.02	16.93-17.93
15	o-Nitrotoluene	1000.000	968.775	3.1	101	0.00	18.53-19.53
16	3,5-Dinitroaniline	1000.000	968.775	3.1	101	0.00	18.53-19.53
17	p-Nitrotoluene	1000.000	960.737	3.9	102	-0.02	19.95-20.95
18	4-Amino-2,6-Dinitrotol	1000.000	957.743	4.2	101	0.00	20.60-21.60
19	m-Nitrotoluene	1000.000	961.117	3.9	102	-0.02	21.50-22.50
20	2-Amino-4,6-Dinitrotol	1000.000	982.782	1.7	101	0.02	23.26-24.26
21	PETN		----------	NA	----------		
*****	Signal #2 *****						
1	TNX	1000.000	961.269	3.9	101	0.00	5.14- 6.14
	----------	Amount	Calc.	%Drift			----------
2	HMX	1000.000	952.039	4.8	98	0.00	5.74- 6.74
	----------	Amount	Calc.	%Drift			----------
3	DNX	1000.000	888.876	11.1	102	0.00	5.88- 6.88
4	MNX	1000.000	955.493	4.5	100	-0.01	7.24- 8.24
5	1,3,5-Trinitrobenzene	1000.000	983.462	1.7	100	-0.02	8.17- 9.17

8.6.9

8

Continuing Calibration Summary

Job Number: FA19379
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM
Sample: GGG2312-CC2305
Lab FileID: GG057452.D

6	RDX	1000.000	1007.141	-0.7	100	-0.02	8.74- 9.74
7	1,3-Dinitrobenzene	1000.000	981.283	1.9	102	-0.03	10.80-11.80
8	Nitrobenzene	1000.000	936.897	6.3	101	-0.04	11.77-12.77
		Amount	Calc.	%Drift			
9	2,4,6-Trinitrotoluene	1000.000	980.959	1.9	100	-0.03	12.87-13.87
		Amount	Calc.	%Drift			
10	Nitroglycerin	5000.000	4747.342	5.1	100	-0.04	13.75-14.75
		Amount	Calc.	%Drift			
11	Tetryl	1000.000	970.736	2.9	98	-0.02	14.59-15.59
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene	1000.000	965.162	3.5	101	-0.03	15.70-16.70
13	2,6-Dinitrotoluene	1000.000	937.037	6.3	101	-0.03	16.12-17.12
14	2,4-Dinitrotoluene	1000.000	952.607	4.7	102	-0.02	16.92-17.92
15	o-Nitrotoluene	1000.000	921.917	7.8	100	0.00	18.52-19.52
16	3,5-Dinitroaniline	1000.000	917.864	8.2	100	0.00	18.53-19.53
17	p-Nitrotoluene	1000.000	957.034	4.3	99	-0.02	19.95-20.95
18	4-Amino-2,6-Dinitrotol	1000.000	971.829	2.8	98	0.00	20.60-21.60
19	m-Nitrotoluene	1000.000	958.242	4.2	99	-0.02	21.50-22.50
20	2-Amino-4,6-Dinitrotol	1000.000	1068.544	-6.9	102	0.02	23.26-24.26
21	PETN	5000.000	8038.717	-60.8#	163	0.00	25.19-26.19

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG057227.D 8330_RPB2.M Mon Nov 03 07:33:09 2014

8.6.9

Continuing Calibration Summary

Job Number: FA19379 **Sample:** GGG2312-ECC2305
Account: BBAFLFWB Trinity Analysis & Development Corp **Lab FileID:** GG057460.D
Project: Melrose Air Force Range, NM

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\1031RPB2\GG057460.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\1031RPB2\GG057460.D\dad1A.ch
Acq On : 31-Oct-2014, 17:52:54 Operator: kismetl
Sample : ecc2305-1000 Inst : G1315B
Misc : OP53732,GGG2312,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Tue Oct 28 07:15:30 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	949.751	5.0	101	0.00	5.14- 6.14
2	HMX	1000.000	906.172	9.4	102	0.00	5.76- 6.76
3	DNX	1000.000	882.842	11.7	95	0.00	5.88- 6.88
4	MNX	1000.000	971.588	2.8	100	-0.01	7.24- 8.24
5	1,3,5-Trinitrobenzene	1000.000	950.138	5.0	99	-0.02	8.17- 9.17
6	RDX	1000.000	950.904	4.9	100	-0.02	8.74- 9.74
7	1,3-Dinitrobenzene	1000.000	957.548	4.2	100	-0.03	10.80-11.80
8	Nitrobenzene	1000.000	968.706	3.1	101	-0.04	11.77-12.77
	--- Amount	Calc.	%Drift	---			
9	2,4,6-Trinitrotoluene	1000.000	982.488	1.8	99	-0.04	12.87-13.87
	--- Amount	Calc.	%Drift	---			
10	Nitroglycerin	----------NA----------					
	--- Amount	Calc.	%Drift	---			
11	Tetryl	1000.000	972.023	2.8	98	-0.03	14.59-15.59
	--- Amount	Calc.	%Drift	---			
12 S	3,4-Dinitrotoluene	1000.000	965.524	3.4	101	-0.03	15.71-16.71
13	2,6-Dinitrotoluene	1000.000	957.774	4.2	100	-0.03	16.12-17.12
14	2,4-Dinitrotoluene	1000.000	962.351	3.8	101	-0.02	16.93-17.93
15	o-Nitrotoluene	1000.000	971.506	2.8	101	0.00	18.53-19.53
16	3,5-Dinitroaniline	1000.000	971.506	2.8	101	0.00	18.53-19.53
17	p-Nitrotoluene	1000.000	970.704	2.9	103	-0.02	19.95-20.95
18	4-Amino-2,6-Dinitrotol	1000.000	953.246	4.7	100	0.00	20.60-21.60
19	m-Nitrotoluene	1000.000	967.414	3.3	102	-0.01	21.50-22.50
20	2-Amino-4,6-Dinitrotol	1000.000	978.932	2.1	101	0.03	23.26-24.26
21	PETN	----------NA----------					
*****	Signal #2 *****						
1	TNX	1000.000	956.263	4.4	100	0.00	5.14- 6.14
	--- Amount	Calc.	%Drift	---			
2	HMX	1000.000	946.619	5.3	97	0.00	5.74- 6.74
	--- Amount	Calc.	%Drift	---			
3	DNX	1000.000	883.768	11.6	102	0.00	5.88- 6.88
4	MNX	1000.000	949.687	5.0	99	-0.01	7.24- 8.24
5	1,3,5-Trinitrobenzene	1000.000	978.160	2.2	99	-0.02	8.17- 9.17

8.6.10

8

Continuing Calibration Summary

Job Number: FA19379
Account: BBAFLFWB Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM
Sample: GGG2312-ECC2305
Lab FileID: GG057460.D

6	RDX	1000.000	1004.709	-0.5	100	-0.02	8.74- 9.74
7	1,3-Dinitrobenzene	1000.000	976.806	2.3	101	-0.03	10.80-11.80
8	Nitrobenzene	1000.000	933.540	6.6	100	-0.04	11.77-12.77
		Amount	Calc.	%Drift			
9	2,4,6-Trinitrotoluene	1000.000	972.170	2.8	99	-0.04	12.87-13.87
		Amount	Calc.	%Drift			
10	Nitroglycerin	5000.000	4704.835	5.9	99	-0.04	13.75-14.75
		Amount	Calc.	%Drift			
11	Tetryl	1000.000	963.247	3.7	98	-0.03	14.59-15.59
		Amount	Calc.	%Drift			
12 S	3,4-Dinitrotoluene	1000.000	958.364	4.2	100	-0.03	15.70-16.70
13	2,6-Dinitrotoluene	1000.000	929.629	7.0	100	-0.03	16.12-17.12
14	2,4-Dinitrotoluene	1000.000	935.879	6.4	101	-0.02	16.92-17.92
15	o-Nitrotoluene	1000.000	922.986	7.7	100	0.00	18.52-19.52
16	3,5-Dinitroaniline	1000.000	918.929	8.1	100	0.00	18.53-19.53
17	p-Nitrotoluene	1000.000	966.628	3.3	100	-0.02	19.95-20.95
18	4-Amino-2,6-Dinitrotol	1000.000	981.492	1.9	99	0.00	20.60-21.60
19	m-Nitrotoluene	1000.000	970.837	2.9	100	-0.01	21.50-22.50
20	2-Amino-4,6-Dinitrotol	1000.000	1062.713	-6.3	101	0.03	23.26-24.26
21	PETN	5000.000	7869.859	-57.4#	160	-0.01	25.19-26.19

(#) = Out of Range SPCC's out = 0 CCC's out = 0

GG057227.D 8330_RPB2.M Mon Nov 03 07:33:10 2014

8.6.10

8

Southeast ACCUTEST LABORATORIES

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA19379
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

File ID: H51031W2.CSV Date Analyzed: 10/31/14 Methods: SW846 7470A
Analyst: JL Run ID: MA12005
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:01	MA12005-STD1	1		STD1
13:02	MA12005-STD2	1		STD2
13:04	MA12005-STD3	1		STD3
13:06	MA12005-STD4	1		STD4
13:08	MA12005-STD5	1		STD5
13:10	MA12005-STD6	1		STD6
13:12	MA12005-HSTD1	1		
13:14	MA12005-ICV1	1		
13:16	MA12005-ICB1	1		
13:18	MA12005-CRI1	1		
13:20	MA12005-CCV1	1		
13:21	MA12005-CCB1	1		
13:24	MP28146-MB1	1		
13:25	MP28146-B1	1		
13:27	FA19469-1	1		(sample used for QC only; not part of login FA19379)
13:29	MP28146-D1	1		
13:30	MP28146-SD1	5		
13:32	MP28146-S1	1		
13:33	MP28146-S2	1		
13:35	ZZZZZZ	1		
13:37	ZZZZZZ	1		
13:39	ZZZZZZ	1		
13:41	MA12005-CCV2	1		
13:42	MA12005-CCB2	1		
13:44	ZZZZZZ	1		
13:46	ZZZZZZ	1		
13:47	ZZZZZZ	1		
13:49	ZZZZZZ	1		
13:51	ZZZZZZ	1		
13:52	ZZZZZZ	1		
13:54	ZZZZZZ	1		
13:56	ZZZZZZ	1		
13:57	ZZZZZZ	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA19379
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

File ID: H51031W2.CSV Date Analyzed: 10/31/14 Methods: SW846 7470A
Analyst: JL Run ID: MA12005
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:59	ZZZZZZ	1		
14:00	MA12005-CCV3	1		
14:02	MA12005-CCB3	1		
14:04	ZZZZZZ	1		
14:06	ZZZZZZ	1		
14:07	ZZZZZZ	1		
14:09	ZZZZZZ	1		
14:11	FA19379-1	1		
14:12	FA19379-1F	1		
---------->	Last reportable sample/prep for job FA19379			
14:14	MP28147-MB1	1		
14:16	MP28147-B1	1		
14:17	FA19513-2	1		(sample used for QC only; not part of login FA19379)
14:19	MP28147-D1	1		
14:21	MA12005-CCV4	1		
14:22	MA12005-CCB4	1		
14:24	MP28147-SD1	5		
14:26	MP28147-S1	1		
14:27	MP28147-S2	1		
14:29	ZZZZZZ	1		
14:31	ZZZZZZ	1		
14:33	ZZZZZZ	1		
14:35	ZZZZZZ	1		
14:36	ZZZZZZ	1		
14:38	ZZZZZZ	1		
14:40	ZZZZZZ	1		
14:41	MA12005-CCV5	1		
14:43	MA12005-CCB5	1		
14:45	ZZZZZZ	1		
14:47	ZZZZZZ	1		
14:48	ZZZZZZ	1		
14:50	ZZZZZZ	1		
14:56	MA12005-CRI2	1		
14:57	MA12005-CCV6	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA19379
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

File ID: H51031W2.CSV Date Analyzed: 10/31/14 Methods: SW846 7470A
Analyst: JL Run ID: MA12005
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
14:59	MA12005-CCB6	1		

----------> Last reportable CCB for job FA19379
Refer to raw data for calibration curve and standards.

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA19379
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

File ID: H51031W2.CSV Date Analyzed: 10/31/14 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA12005 Units: ug/l

Time: / Sample ID:			13:16 ICB1		13:21 CCB1		13:42 CCB2		14:02 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.50	.03	0.042	<0.50	0.0045	<0.50	-0.0037	<0.50	0.0034	<0.50

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA19379
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

File ID: H51031W2.CSV Date Analyzed: 10/31/14 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA12005 Units: ug/l

Time: / Sample ID:			14:22 CCB4		14:43 CCB5		14:59 CCB6	
Metal	RL	IDL	raw	final	raw	final	raw	final
Mercury	0.50	.03	0.0070	<0.50	-0.0024	<0.50	-0.0059	<0.50

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA19379
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

File ID: H51031W2.CSV Date Analyzed: 10/31/14 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA12005 Units: ug/l

Time: / Sample ID: / Metal	ICV True	13:14 ICV1 Results	% Rec	CCV True	13:20 CCV1 Results	% Rec	CCV True	13:41 CCV2 Results	% Rec
Mercury	3	3.2	106.7	3	2.9	96.7	3	2.9	96.7

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA19379
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

File ID: H51031W2.CSV Date Analyzed: 10/31/14 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA12005 Units: ug/l

Time:		14:00			14:21			14:41	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	3	2.9	96.7	3	2.8	93.3	3	2.8	93.3

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA19379
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

File ID: H51031W2.CSV Date Analyzed: 10/31/14 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA12005 Units: ug/l

Time:		14:57	
Sample ID:	CCV	CCV6	
Metal	True	Results	% Rec
Mercury	3	2.8	93.3

(*) Outside of QC limits
(anr) Analyte not requested

9.1.2
9

HIGH STANDARD CHECK SUMMARY

Login Number: FA19379
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

File ID: H51031W2.CSV Date Analyzed: 10/31/14 Methods: SW846 7470A
QC Limits: 95 to 105 % Recovery Run ID: MA12005 Units: ug/l

Time:		13:12	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Mercury	6.0	6.0	100.0

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA19379
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

File ID: H51031W2.CSV Date Analyzed: 10/31/14 Methods: SW846 7470A
QC Limits: 80 to 120 % Recovery Run ID: MA12005 Units: ug/l

Time:			13:18		14:56	
Sample ID:	CRI	CRIA	CRI1		CRI2	
Metal	True	True	Results	% Rec	Results	% Rec
Mercury	0.20		0.20	100.0	0.21	105.0

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA19379
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

QC Batch ID: MP28146
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 10/31/14

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.50	.03	.03	0.011	<0.50

Associated samples MP28146: FA19379-1, FA19379-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA19379
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

QC Batch ID: MP28146
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 10/31/14 10/31/14

Metal	FA19469-1 Original	DUP	RPD	QC Limits	FA19469-1 Original	MS	Spikelot HGFLWS1	% Rec	QC Limits
Mercury	0.0	0.0	NC	0-20	0.0	2.7	3	90.0	80-120

Associated samples MP28146: FA19379-1, FA19379-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA19379
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

QC Batch ID: MP28146
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 10/31/14

Metal	FA19469-1 Original	MSD	Spikelot HGFLWS1	% Rec	MSD RPD	QC Limit
Mercury	0.0	2.8	3	93.3	3.6	20

Associated samples MP28146: FA19379-1, FA19379-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA19379
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

QC Batch ID: MP28146
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 10/31/14

Metal	BSP Result	Spikelot HGFLWS1	% Rec	QC Limits
Mercury	3.0	3	100.0	80-120

Associated samples MP28146: FA19379-1, FA19379-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA19379
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

QC Batch ID: MP28146
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 10/31/14

Metal	FA19469-1 Original	SDL 1:5	%DIF	QC Limits
Mercury	0.00	0.00	NC	0-10

Associated samples MP28146: FA19379-1, FA19379-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

Southeast ACCUTEST LABORATORIES

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries
- Instrument Runlogs/QC

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA19379
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Alkalinity, Total as CaCO3	GN63916	5.0	1.4	mg/l	250	248	99.2	90-113%
Chromium, Hexavalent	GN63806	0.010	0.0	mg/l	.100	0.10	101.0	85-115%
Cyanide, Total	GP24932/GN63981	0.010	0.0	mg/l	0.101	0.101	100.0	90-110%
Nitrogen, Nitrate	GP24875/GN63845	0.10	0.0	mg/l	2.5	2.33	93.2	90-110%
Solids, Total Dissolved	GN63848	100	0.0	mg/l				
Sulfate	GP24875/GN63845	2.0	0.0	mg/l	50	50.5	101.0	90-110%

Associated Samples:
Batch GN63806: FA19379-1
Batch GN63848: FA19379-1
Batch GN63916: FA19379-1
Batch GP24875: FA19379-1
Batch GP24932: FA19379-1
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA19379
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Alkalinity, Total as CaCO3	GN63916	FA19506-2	mg/l	137	139	1.4	0-20%
Cyanide, Total	GP24932/GN63981	FA19379-1	mg/l	0.0059	0.0045	10.5	0-20%
Solids, Total Dissolved	GN63848	FA19421-1	mg/l	41.0	41.0	0.0	0-5%

Associated Samples:
Batch GN63848: FA19379-1
Batch GN63916: FA19379-1
Batch GP24932: FA19379-1
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA19379
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chromium, Hexavalent	GN63806	FA19379-1	mg/l	0.0	.100	0.13	131.0*(a)	85-115%
Cyanide, Total	GP24932/GN63981	FA19379-1	mg/l	0.0059	0.2	0.22	107.1	90-110%
Nitrogen, Nitrate	GP24875/GN63845	FA19378-6	mg/l	0.0	2.5	2.1	84.0N(a)	90-110%
Sulfate	GP24875/GN63845	FA19378-6	mg/l	9.5	50	54.1	89.2N(a)	90-110%

Associated Samples:
Batch GN63806: FA19379-1
Batch GP24875: FA19379-1
Batch GP24932: FA19379-1
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(a) Spike recovery indicates possible matrix interference.

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA19379
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Chromium, Hexavalent	GN63806	FA19379-1	mg/l	0.0	.100mg/l	0.12	6.1	20%
Cyanide, Total	GP24932/GN63981	FA19379-1	mg/l	0.0059	0.2	0.22	0.0	20%
Nitrogen, Nitrate	GP24875/GN63845	FA19378-6	mg/l	0.0	2.5	2.1	0.0	20%
Sulfate	GP24875/GN63845	FA19378-6	mg/l	9.5	50	54.3	0.4	20%

Associated Samples:
Batch GN63806: FA19379-1
Batch GP24875: FA19379-1
Batch GP24932: FA19379-1
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA19379
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

File ID: 314102401.TXT Date Analyzed: 10/24/14 Methods: EPA 300/SW846 9056A
Analyst: VK Run ID: GN63845
Parameters: Chloride,Nitrogen, Nitrate,Nitrogen, Nitrite,Sulfate

Time	Sample Description	Dilution Factor	PS Recov	Comments
08:23	GN63845-CCV1	1		
08:40	ZZZZZZ	5		
09:14	ZZZZZZ	5		
09:31	ZZZZZZ	5		
09:48	GP24874-MB1	1		
10:05	GP24874-B1	1		
10:55	ZZZZZZ	1		
11:12	GN63845-CCV2	1		
11:29	GN63845-CCB1	1		
11:46	ZZZZZZ	5		
12:03	ZZZZZZ	5		
12:20	ZZZZZZ	5		
12:37	ZZZZZZ	2		
12:54	ZZZZZZ	2		
13:11	ZZZZZZ	2		
13:28	ZZZZZZ	2		
13:45	FA19361-2	1		(sample used for QC only; not part of login FA19379)
14:02	FA19361-3	1		(sample used for QC only; not part of login FA19379)
14:19	ZZZZZZ	5		
14:36	GN63845-CCV3	1		
14:53	GN63845-CCB2	1		
15:10	ZZZZZZ	5		
15:27	ZZZZZZ	10		
15:44	ZZZZZZ	10		
16:01	ZZZZZZ	10		
16:18	ZZZZZZ	10		
16:35	GP24874-S1	1		
16:51	GP24874-S2	1		
17:08	GP24874-S3	1		
17:25	GP24874-S4	1		
17:42	GN63845-CCV4	1		
17:59	GP24875-MB1	1		
18:16	GP24875-B1	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA19379
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

File ID: 314102401.TXT Date Analyzed: 10/24/14 Methods: EPA 300/SW846 9056A
Analyst: VK Run ID: GN63845
Parameters: Chloride,Nitrogen, Nitrate,Nitrogen, Nitrite,Sulfate

Time	Sample Description	Dilution Factor	PS Recov	Comments
18:33	ZZZZZZ	10		
18:50	FA19378-6	10		(sample used for QC only; not part of login FA19379)
19:07	ZZZZZZ	10		
19:24	ZZZZZZ	10		
19:41	ZZZZZZ	10		
19:58	ZZZZZZ	10		
20:15	FA19379-1	100		
20:32	ZZZZZZ	5		
20:49	ZZZZZZ	10		
21:06	ZZZZZZ	10		
21:23	GN63845-CCV5	1		
21:40	GN63845-CCB3	1		
21:57	ZZZZZZ	100		
22:14	GP24875-S1	10		
22:31	GP24875-S2	10		
22:48	GN63845-CCV6	1		
23:04	GN63845-CCB4	1		

Refer to raw data for calibration curve and standards.

Instrument QC Summary
Inorganics Analyses

Login Number: FA19379
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

File ID: 314102401.TXT Date Analyzed: 10/24/14 Methods: EPA 300/SW846 9056A
Run ID: GN63845 Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN63845-CCV1	Chloride	50.4	2.0	0.80	50	100.8	90-110
GN63845-CCV1	Nitrogen, Nitrite	2.5	0.10	0.050	2.5	100.0	90-110
GN63845-CCV1	Nitrogen, Nitrate	2.4	0.10	0.050	2.5	96.0	90-110
GN63845-CCV1	Sulfate	51.3	2.0	0.60	50	102.6	90-110
GN63845-CCV2	Chloride	50.2	2.0	0.80	50	100.4	90-110
GN63845-CCV2	Nitrogen, Nitrite	2.5	0.10	0.050	2.5	100.0	90-110
GN63845-CCV2	Nitrogen, Nitrate	2.3	0.10	0.050	2.5	92.0	90-110
GN63845-CCV2	Sulfate	49.4	2.0	0.60	50	98.8	90-110
GN63845-CCB1	Chloride	0.80 U	2.0	0.80			
GN63845-CCB1	Nitrogen, Nitrite	0.050 U	0.10	0.050			
GN63845-CCB1	Nitrogen, Nitrate	0.050 U	0.10	0.050			
GN63845-CCB1	Sulfate	0.60 U	2.0	0.60			
GN63845-CCV3	Chloride	50.3	2.0	0.80	50	100.6	90-110
GN63845-CCV3	Nitrogen, Nitrite	2.5	0.10	0.050	2.5	100.0	90-110
GN63845-CCV3	Nitrogen, Nitrate	2.3	0.10	0.050	2.5	92.0	90-110
GN63845-CCV3	Sulfate	49.6	2.0	0.60	50	99.2	90-110
GN63845-CCB2	Chloride	0.80 U	2.0	0.80			
GN63845-CCB2	Nitrogen, Nitrite	0.050 U	0.10	0.050			
GN63845-CCB2	Nitrogen, Nitrate	0.050 U	0.10	0.050			
GN63845-CCB2	Sulfate	0.60 U	2.0	0.60			
GN63845-CCV4	Chloride	50.2	2.0	0.80	50	100.4	90-110
GN63845-CCV4	Nitrogen, Nitrite	2.5	0.10	0.050	2.5	100.0	90-110
GN63845-CCV4	Nitrogen, Nitrate	2.3	0.10	0.050	2.5	92.0	90-110
GN63845-CCV4	Sulfate	49.7	2.0	0.60	50	99.4	90-110
GN63845-CCV5	Chloride	50.4	2.0	0.80	50	100.8	90-110
GN63845-CCV5	Nitrogen, Nitrite	2.5	0.10	0.050	2.5	100.0	90-110
GN63845-CCV5	Nitrogen, Nitrate	2.3	0.10	0.050	2.5	92.0	90-110
GN63845-CCV5	Sulfate	50.6	2.0	0.60	50	101.2	90-110
GN63845-CCB3	Chloride	0.80 U	2.0	0.80			
GN63845-CCB3	Nitrogen, Nitrite	0.050 U	0.10	0.050			
GN63845-CCB3	Nitrogen, Nitrate	0.050 U	0.10	0.050			
GN63845-CCB3	Sulfate	0.60 U	2.0	0.60			
GN63845-CCV6	Chloride	50.5	2.0	0.80	50	101.0	90-110
GN63845-CCV6	Nitrogen, Nitrite	2.5	0.10	0.050	2.5	100.0	90-110
GN63845-CCV6	Nitrogen, Nitrate	2.3	0.10	0.050	2.5	92.0	90-110
GN63845-CCV6	Sulfate	50.4	2.0	0.60	50	100.8	90-110
GN63845-CCB4	Chloride	0.80 U	2.0	0.80			
GN63845-CCB4	Nitrogen, Nitrite	0.050 U	0.10	0.050			
GN63845-CCB4	Nitrogen, Nitrate	0.050 U	0.10	0.050			
GN63845-CCB4	Sulfate	0.60 U	2.0	0.60			

(!) Outside of QC limits

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA19379
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

File ID: B110514CN1.CSV Date Analyzed: 11/05/14 Methods: EPA 335.4/SW 9012B
Analyst: DM Run ID: GN63981
Parameters: Cyanide, Total

Time	Sample Description	Dilution Factor	PS Recov	Comments
14:19	GN63981-ICV1	1		
14:20	GN63981-CCV1	1		
14:21	GN63981-CCB1	1		
14:21	GP24932-MB1	1		
14:22	GP24932-B1	1		
14:23	GN63981-CRI1	1		
14:24	ZZZZZZ	1		
14:26	GP24932-S1	1		
14:27	GP24932-S2	1		
14:27	GP24932-D1	1		
14:28	FA19379-1	1		
14:29	GN63981-CCV2	1		
14:30	GN63981-CCB2	1		
14:31	GN63981-HSTD1	1		
14:32	GP24932-D1	1		
14:33	FA19379-1	1		
14:33	GN63981-CCV3	1		
14:34	GN63981-CCB3	1		

Refer to raw data for calibration curve and standards.

Instrument QC Summary
Inorganics Analyses

Login Number: FA19379
Account: BBAFLFWB - Trinity Analysis & Development Corp
Project: Melrose Air Force Range, NM

File ID: B110514CN1.CSV Date Analyzed: 11/05/14 Methods: EPA 335.4/SW 9012B
Run ID: GN63981 Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN63981-ICV1	Cyanide, Total	0.27	0.010	0.0030	.25	108.0	90-110
GN63981-CCV1	Cyanide, Total	0.27	0.010	0.0030	.25	108.0	90-110
GN63981-CCB1	Cyanide, Total	0.0030 U	0.010	0.0030			
GN63981-CRI1	Cyanide, Total	0.0093	0.010	0.0030	.01	93.0	90-110
GN63981-CCV2	Cyanide, Total	0.27	0.010	0.0030	.25	108.0	90-110
GN63981-CCB2	Cyanide, Total	0.0030 U	0.010	0.0030			
GN63981-HSTD1	Cyanide, Total	0.46	0.010	0.0030	.5	92.0	90-110
GN63981-CCV3	Cyanide, Total	0.27	0.010	0.0030	.25	108.0	90-110
GN63981-CCB3	Cyanide, Total	0.0030 U	0.010	0.0030			

(!) Outside of QC limits

Southeast ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

(Accutest New Jersey)

Includes the following where applicable:

- Chain of Custody

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

4405 Vineland Rd, Suite C-15, Orlando, FL 32811
TEL. 407-425-6700 FAX. 407-425-0707
www.accutest.com

FED-EX Tracking # 6127 2759 5160 | Bottle Order Control # | Accutest Quote # | Accutest Job # FA19379

Client / Reporting Information	Project Information
Company Name: Accutest Laboratories	Project Name: Melrose Air Force Range, NM
Street Address: 4405 Vineland Rd, Suite C-15	Street: Billing Information (if different from Report to)
City State Zip: Orlando FL 32811	City State: Company Name
Project Contact E-mail: jeans jeans@accutest.com	Project #: Street Address
Phone # 407-425-6700 Fax #	Client Purchase Order #: City State Zip
Sampler(s) Name(s) Phone: BSJK	Project Manager: Attention:

Requested Analysis (see TEST CODE sheet)

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB-Equipment Blank; RB- Rinse Blank; TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	AGMS ,ALMS ,ASMS ,BAMS ,BEMS ,CAMS ,CDMS ,COMS ,CRMS ,CUMS ,FEMS ,KMS ,MGMS ,MNMS ,NAMS ,NIMS ,PBMS ,SBMS by 6020	SEMS ,TLMS ,VMS ,ZNMS by 6020	FILTERMET	LAB USE ONLY
1F	MA02MW001D		10/23/14	11:43:00 AM	BSJK	AQ	1					1				X	X	X	
1	MA02MW001D		10/23/14	11:43:00 AM	BSJK	AQ	1			1						X	X		

Turnaround Time (Business days)

Approved By (Accutest PM): / Date:

- [ ] 10 Day (business)
- [ ] 5-7 Day
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [X] other 14

Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1, Results Only)
- [ ] Commercial "B" (Level 2, Results + QC summary)
- [ ] REDT1 (Level 3)
- [ ] FULT1 (Level 4)
- [ ] DOD FULT1 (Level 4)
- [X] Other REDT1
- [ ] EDD Format

Comments / Special Instructions: ALNJ

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	J-CORNE (ACSE)	10-27-14 17:00	FX	FX		10/28/14 10:05
2						
3	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
4						
5	Relinquished by:	Date Time:	Received By:	Custody Seal # [ ] Intact [ ] Not intact	Preserved where applicable [ ]	On Ice [X] Cooler Temp: 4.5°C TP

3B RL

ABC

11.1 11

FA19379: Chain of Custody
Page 1 of 2
Accutest New Jersey

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: FA19379 **Client:** _____ **Project:** _____

Date / Time Received: 10/28/2014 **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Initial/Adjusted): #1: (4.5/4.5); 0

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservatio	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☐		☐	☑

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Accutest Laboratories
V:732.329.0200
2235 US Highway 130
F: 732.329.3499
Dayton, New Jersey
www/accutest.com

FA19379: Chain of Custody
Page 2 of 2

Southeast ACCUTEST LABORATORIES

Metals Analysis

QC Data Summaries

(Accutest New Jersey)

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA19379
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA110614M1L.CSV Date Analyzed: 11/06/14 Methods: SW846 6020A
Analyst: VC Run ID: MA35341
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:43	MA35341-STD1	1		STDA
10:48	MA35341-STD2	1		STDA
10:52	MA35341-STD3	1		STDA
10:57	MA35341-STD4	1		STDB
11:01	MA35341-STD5	1		STDC
11:06	MA35341-STD6	1		STDD
11:11	MA35341-STD7	1		STDE
11:15	MA35341-STD8	1		STDF
11:20	MA35341-STD9	1		STDG
11:24	MA35341-STD10	1		STDH
11:29	MA35341-STD11	1		STDI
11:34	MA35341-STD12	1		STDJ
11:38	MA35341-STD13	1		STDA
11:47	MA35341-STD14	1		STDA
11:52	MA35341-ICV1	1		60ppb Al, not needed.
11:56	MA35341-ICVA1	1		
12:01	MA35341-ICB1	1		
12:06	MA35341-CRIB1	1		
12:10	MA35341-CCVA1	1		
12:15	MA35341-CCB1	1		
12:19	MA35341-ICSA1	1		
12:24	MA35341-ICSAB1	1		
12:29	ZZZZZZ	1		
12:33	MA35341-CCVA2	1		
12:38	MA35341-CCB2	1		
12:43	MP82918-MB1	2		
12:47	ZZZZZZ	2		
12:52	MP82918-B1	25		
12:56	ZZZZZZ	25		
13:02	MP82918-S1	25		
13:06	MP82918-S2	25		
13:11	ZZZZZZ	25		
13:16	ZZZZZZ	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA19379
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA110614M1L.CSV Date Analyzed: 11/06/14 Methods: SW846 6020A
Analyst: VC Run ID: MA35341
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:20	MP82918-MB2	2		(Real Zn in the filtered blank)
13:25	MA35341-CCVA3	1		
13:30	MA35341-CCB3	1		
13:34	MP82918-B2	25		
13:39	ZZZZZZ	1		
13:43	C36707-1F	2		(sample used for QC only; not part of login FA19379)
13:48	MP82918-SD1	10		
13:53	FA19379-1	2		
13:57	FA19379-1F	2		
14:02	ZZZZZZ	2		
14:07	ZZZZZZ	2		
14:11	ZZZZZZ	1		
14:16	MA35341-CCVA4	1		
14:20	MA35341-CCB4	1		
14:25	ZZZZZZ	2		
14:30	ZZZZZZ	2		
14:34	ZZZZZZ	2		
14:39	ZZZZZZ	2		
14:44	ZZZZZZ	2		
14:48	MP82918-PS1	2		
14:53	ZZZZZZ	1		
14:58	MA35341-CCVA5	1		
15:02	MA35341-CCB5	1		
15:07	MP82918-S1	100		Mn
15:11	MP82918-S2	100		
15:16	C36707-1F	10		(sample used for QC only; not part of login FA19379)
15:21	MP82918-SD1	50		
15:25	C36707-1F	100		(sample used for QC only; not part of login FA19379)
15:30	MP82918-SD1	500		
15:34	ZZZZZZ	1		
15:39	MA35341-CCVA6	1		
15:44	MA35341-CCB6	1		
15:48	MP82918-PS1	10		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA19379
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA110614M1L.CSV Date Analyzed: 11/06/14 Methods: SW846 6020A
Analyst: VC Run ID: MA35341
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:53	ZZZZZZ	100		
15:57	FA19379-1	10		
16:02	FA19379-1	25		
16:07	ZZZZZZ	250		
16:11	FA19379-1F	10		
16:16	FA19379-1F	25		
16:21	ZZZZZZ	250		
16:25	MP82918-PS1	100		
16:30	MA35341-CCVA7	1		
16:35	MA35341-CCB7	1		
16:39	ZZZZZZ	1		
16:48	FA19379-1	250		
16:52	FA19379-1F	250		
---------->	Last reportable sample/prep for job FA19379			
16:57	ZZZZZZ	1		
17:02	ZZZZZZ	1		
17:06	MA35341-CRIB2	1		
17:11	MA35341-CCVA8	1		
17:16	MA35341-CCB8	1		
---------->	Last reportable CCB for job FA19379			
17:20	ZZZZZZ	1		
17:25	ZZZZZZ	1		
17:29	ZZZZZZ	1		
17:34	ZZZZZZ	1		
17:39	ZZZZZZ	1		
17:43	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: FA19379
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA110614M1L.CSV Date Analyzed: 11/06/14 Methods: SW846 6020A
Analyst: VC Run ID: MA35341
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
10:43	MA35341-STD1	100	100	100	100	100	100	100	100
10:48	MA35341-STD2	100	100	100	100	100	100	100	100
10:52	MA35341-STD3	100	100	100	100	100	100	100	100
10:57	MA35341-STD4	99.047	100.075	98.019	99.806	98.986	99.381	98.781	99.488
11:01	MA35341-STD5	99.736	99.997	98.717	99.568	99.886	100.209	100.542	99.549
11:06	MA35341-STD6	102.845	100.963	99.14	99.066	100.843	100.569	98.958	101.444
11:11	MA35341-STD7	100.573	100.362	98.832	98.952	99.797	99.917	98.357	100.46
11:15	MA35341-STD8	102.67	100.348	98.475	99.797	100.973	100.509	98.958	101.848
11:20	MA35341-STD9	104.456	101.658	99.162	99.515	99.987	101.061	99.903	100.671
11:24	MA35341-STD10	103.299	101.61	100.002	100.049	99.677	100.227	98.31	100.546
11:29	MA35341-STD11	103.37	101.168	101.085	99.517	98.59	100.216	98.581	99.58
11:34	MA35341-STD12	102.502	101.257	100.693	99.847	98.843	99.858	99.091	99.402
11:38	MA35341-STD13	105.726	101.804	98.209	99.997	100.701	99.74	99.756	101.433
11:47	MA35341-STD14	105.791	103.238	102.029	101.01	101.215	102.07	100.519	102.933
11:52	MA35341-ICV1	No results reported for the elements associated with this internal standard.							
11:56	MA35341-ICVA1	106.279	103.786	102.569	101.763	101.634	101.645	100.103	102.854
12:01	MA35341-ICB1	107.007	103.007	100.712	101.731	101.813	101.53	100.154	101.406
12:06	MA35341-CRIB1	107.921	103.399	100.484	101.043	101.197	101.045	99.547	101.559
12:10	MA35341-CCVA1	98.598	95.372	93.866	95.385	98.881	100.588	96.796	99.744
12:15	MA35341-CCB1	107.731	103.578	100.587	101.51	101.477	101.418	100.738	102.395
12:19	MA35341-ICSA1	93.249	97.353	99.346	98.21	94.642	98.407	97.366	93.133
12:24	MA35341-ICSAB1	92.065	99.07	99.1	98.138	95.526	99.614	97.282	94.112
12:29	ZZZZZZ	102.307	101.694	99.461	101.792	100.547	101.317	100.796	100.826
12:33	MA35341-CCVA2	94.614	96.326	95.595	98.204	92.428	92.877	94.637	93.683
12:38	MA35341-CCB2	103.671	104.214	102.624	104.636	102.701	103.592	102.088	103.45
12:43	MP82918-MB1	97.638	100.415	94.997	101.178	100.116	98.385	100.899	100.849
12:47	ZZZZZZ	95.186	97.385	95.485	100.388	98.174	98.645	100.314	98.544
12:52	MP82918-B1	111.06	110.261	108.17	105.758	107.759	109.043	104.119	109.404
12:56	ZZZZZZ	114.714	112.705	109.691	106.307	109.533	108.676	104.545	110.532
13:02	MP82918-S1	112.63	111.206	108.966	105.879	107.128	107.006	103.561	108.921
13:06	MP82918-S2	111.39	110.287	108.481	106.455	106.755	106.774	103.393	107.782
13:11	ZZZZZZ	112.729	110.883	108.943	105.875	107.231	108.531	103.196	108.019
13:16	ZZZZZZ	104.518	103.547	102.122	103.162	101.085	102.341	101.49	101.098

INTERNAL STANDARD SUMMARY

Login Number: FA19379
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA110614M1L.CSV Date Analyzed: 11/06/14 Methods: SW846 6020A
Analyst: VC Run ID: MA35341
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
13:20	MP82918-MB2	103.644	102.856	97.306	100.299	102.642	100.288	100.194	102.705
13:25	MA35341-CCVA3	99.598	99.899	92.567	98.114	95.985	92.937	93.571	96.143
13:30	MA35341-CCB3	106.045	103.518	100.33	102.075	101.472	101.617	100.614	102.343
13:34	MP82918-B2	113.948	110.244	107.309	106.128	106.808	108.054	104.197	107.996
13:39	ZZZZZZ	103.923	101.847	101.575	102.252	99.399	102.036	100.39	100.88
13:43	C36707-1F	95.555	99.273	96.958	98.322	97.004	96.679	97.565	97.184
13:48	MP82918-SD1	107.594	108.116	105.26	104.96	104.278	106.275	104.279	105.464
13:53	FA19379-1	78.762	96.821	104.767	106.889	92.026	99.163	100.894	93.159
13:57	FA19379-1F	89.355	104.992	107.86	110.438	99.423	105.702	103.475	99.912
14:02	ZZZZZZ	112.391	114.707	106.066	110.199	113.134	110.182	109.441	112.96
14:07	ZZZZZZ	113.087	114.76	104.39	107.406	113.623	107.095	110.08	114.093
14:11	ZZZZZZ	121.63	118.823	112.554	114.97	115.801	115.061	113.423	117.346
14:16	MA35341-CCVA4	112.938	111.293	104.653	106.825	108.099	101.857	103.942	108.595
14:20	MA35341-CCB4	120.992	118.816	114.193	114.693	115.886	113.328	112.196	117.155
14:25	ZZZZZZ	111.573	114.695	107.308	107.099	112.145	106.701	106.075	111.818
14:30	ZZZZZZ	115.281	116.529	106.704	108.391	114.291	107.286	106.097	112.756
14:34	ZZZZZZ	115.335	115.827	105.015	106.649	115.043	106.547	113.813	113.87
14:39	ZZZZZZ	114.701	116.258	105.941	107.312	112.151	105.744	106.424	111.805
14:44	ZZZZZZ	116.329	116.882	106.088	107.238	113.08	106.773	105.962	113.307
14:48	MP82918-PS1	114.821	115.95	106.424	108.758	113.446	108.654	109.302	113.235
14:53	ZZZZZZ	125.294	120.467	112.693	113.334	118.519	115.243	112.899	119.408
14:58	MA35341-CCVA5	116.513	114.592	104.377	108.812	112.13	104.433	104.812	111.344
15:02	MA35341-CCB5	126.017	120.058	113.406	114.125	117.802	114.662	113.221	118.474
15:07	MP82918-S1	134.378	!a129.439	124.502	118.933	125.625	125.072	117.654	126.335
15:11	MP82918-S2	131.341	!a126.768	121.553	117.44	123.999	122.957	116.242	124.391
15:16	C36707-1F	122.284	120.393	117.296	115.331	118.051	116.317	113.639	118.042
15:21	MP82918-SD1	130.232	!a126.164	122.92	118.279	125.072	124.122	118.8	124.584
15:25	C36707-1F	132.166	!a130.295	!a125.643	120.903	127.02	127.06	120.237	126.852
15:30	MP82918-SD1	132.782	!a129.497	125.128	120.825	126.028	126.391	119.46	126.195
15:34	ZZZZZZ	116.894	119.313	110.731	117.154	116.749	113.907	115.462	117.513
15:39	MA35341-CCVA6	109.209	110.71	107.868	110.293	109.752	107.941	107.937	109.195
15:44	MA35341-CCB6	120.023	120.218	115.553	115.802	117.766	117.683	114.991	117.843
15:48	MP82918-PS1	121.675	121.438	117.768	116.813	118.98	118.976	116.19	120.14

INTERNAL STANDARD SUMMARY

Login Number: FA19379
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA110614M1L.CSV Date Analyzed: 11/06/14 Methods: SW846 6020A
Analyst: VC Run ID: MA35341
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
15:53	ZZZZZZ	126.897	125.045	120.709	121.32	123.059	123.119	120.903	124.844
15:57	FA19379-1	105.847	118.876	122.267	121.38	115.279	119.874	116.078	115.917
16:02	FA19379-1	121.371	125.185	125.035	123.59	121.438	122.207	119.539	122.417
16:07	ZZZZZZ	132.463 !	130.952 !	127.714	124.002	128.426	126.995	122.425	128.406
16:11	FA19379-1F	106.917	120.538	125.126	122.14	115.598	122.192	116.816	116.667
16:16	FA19379-1F	122.571	127.122	126.401	123.422	122.846	124.273	120.602	123.823
16:21	ZZZZZZ	130.813 !	128.378	126.768	121.742	126.389	128.018	120.588	127.367
16:25	MP82918-PS1	126.499	126.367	124.077	120.922	123.804	123.461	119.384	124.367
16:30	MA35341-CCVA7	110.516	110.903	108.788	109.183	111.472	110.148	110.179	112.262
16:35	MA35341-CCB7	121.228	118.399	116.658	110.559	116.904	116.201	111.16	117.464
16:39	ZZZZZZ	118.464	118.933	114.458	115.174	115.295	116.029	112.158	116.643
16:48	FA19379-1	128.966	127.033	125.86	121.656	125.435	126.387	120.191	125.049
16:52	FA19379-1F	130.079	!a126.76	125.369	121.986	125.801	125.171	121.155	125.065
16:57	ZZZZZZ	114.82	120.398	113.945	114.304	114.788	114.348	113.788	115.88
17:02	ZZZZZZ	116.975	117.783	114.583	115.011	115.624	115.462	113.992	116.538
17:06	MA35341-CRIB2	115.585	117.207	114.589	115.101	115.859	116.634	112.135	116.544
17:11	MA35341-CCVA8	111.235	113.189	106.927	105.986	114.977	108.031	107.677	115.511
17:16	MA35341-CCB8	116.392	116.947	113.836	115.376	115.588	115.581	114.247	116.325
17:20	ZZZZZZ	108.799	112.031	105.952	108.602	113.753	111.27	107.083	113.748
17:25	ZZZZZZ	115.065	116.454	115.3	113.383	113.631	114.753	112.635	114.117
17:29	ZZZZZZ	114.103	116.425	115.448	114.728	114.451	115.462	112.5	114.822
17:34	ZZZZZZ	113.636	116.79	114.412	114.501	114.282	114.804	113.387	115.177
17:39	ZZZZZZ	112.011	115.212	113.743	115.078	113.228	114.34	113.832	113.736
17:43	ZZZZZZ	112.849	115.614	112.5	114.627	115.261	115.245	112.345	115.706

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#1	Lithium	70-130 %	70-130 %
Istd#2	Scandium (45-1)	70-130 %	70-130 %
Istd#3	Scandium (45-2)	70-130 %	70-130 %
Istd#4	Scandium (45-3)	70-130 %	70-130 %
Istd#5	Germanium (72-1)	70-130 %	70-130 %
Istd#6	Germanium (72-2)	70-130 %	70-130 %
Istd#7	Germanium (72-3)	70-130 %	70-130 %
Istd#8	Germanium (74-1)	70-130 %	70-130 %

(a) No samples reported for the elements associated with this internal standard.

INTERNAL STANDARD SUMMARY

Login Number: FA19379
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA110614M1L.CSV Date Analyzed: 11/06/14 Methods: SW846 6020A
Analyst: VC Run ID: MA35341
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
10:43	MA35341-STD1	100	100	100	100	100	100	100	100
10:48	MA35341-STD2	100	100	100	100	100	100	100	100
10:52	MA35341-STD3	100	100	100	100	100	100	100	100
10:57	MA35341-STD4	98.684	99.984	99.896	99.133	99.444	100.142	99.871	99.502
11:01	MA35341-STD5	98.323	100.816	100.361	100.117	99.683	100.306	99.263	100.066
11:06	MA35341-STD6	99.442	99.4	100.796	100.284	99.12	100.443	99.554	100.732
11:11	MA35341-STD7	99.078	99.813	100.359	98.662	98.582	99.613	98.958	100.181
11:15	MA35341-STD8	99.739	100.127	101.175	99.869	98.814	100.982	100.127	100.709
11:20	MA35341-STD9	100.024	100.235	101.83	100.985	99.292	102.727	100.717	102.708
11:24	MA35341-STD10	98.803	99.26	100.512	99.68	97.949	101.659	99.631	102.202
11:29	MA35341-STD11	98.281	99.026	98.683	97.367	96.35	99.239	98.267	101.023
11:34	MA35341-STD12	97.553	98.574	97.959	96.608	95.432	98.687	97.23	100.963
11:38	MA35341-STD13	99.19	99.649	102.383	100.716	99.849	102.315	98.9	102.981
11:47	MA35341-STD14	100.763	100.78	104.151	103.024	101.288	102.509	101.624	103.743
11:52	MA35341-ICV1	No results reported for the elements associated with this internal standard.							
11:56	MA35341-ICVA1	100.903	100.922	99.967	98.722	97.345	100.445	99.325	102.786
12:01	MA35341-ICB1	100.335	101.296	103.695	100.743	100.931	103.023	100.374	102.852
12:06	MA35341-CRIB1	99.791	100.301	103.828	101.231	100.77	103.399	100.876	104.126
12:10	MA35341-CCVA1	99.172	96.714	94.121	93.682	93.418	95.711	92.15	98.404
12:15	MA35341-CCB1	100.355	100.473	103.838	101.595	101.355	103.183	100.248	103.553
12:19	MA35341-ICSA1	94.113	93.958	89.056	87.46	86.043	92.238	91.153	96.268
12:24	MA35341-ICSAB1	94.905	93.555	90.206	88.256	85.698	93.362	90.768	97.441
12:29	ZZZZZZ	100.306	101.375	103.589	103.125	102.889	103.977	99.988	105.012
12:33	MA35341-CCVA2	91.732	95.723	96.153	94.605	96.637	97.623	92.69	101.529
12:38	MA35341-CCB2	102.331	102.854	105.758	104.009	103.709	106.079	101.89	106.832
12:43	MP82918-MB1	97.34	101.362	101.869	97.738	100.422	102.055	94.687	103.997
12:47	ZZZZZZ	97.995	100.45	100.131	98.888	99.692	100.475	95.538	103.02
12:52	MP82918-B1	106.699	105.263	108.812	106.021	104.424	108.686	105.744	108.422
12:56	ZZZZZZ	107.234	104.883	111.334	106.703	104.451	110.781	106.008	110.905
13:02	MP82918-S1	105.661	104.532	108.033	105.266	103.642	109.328	105.454	108.712
13:06	MP82918-S2	105.929	104.888	107.712	105.277	103.538	108.446	104.781	107.927
13:11	ZZZZZZ	107.306	104.535	109.673	106.903	103.744	109.925	106.139	109.515
13:16	ZZZZZZ	101.344	102.191	104.453	103.567	102.609	105.08	100.935	105.798

INTERNAL STANDARD SUMMARY

Login Number: FA19379
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA110614M1L.CSV Date Analyzed: 11/06/14 Methods: SW846 6020A
Analyst: VC Run ID: MA35341
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
13:20	MP82918-MB2	98.213	101.032	104.923	100.486	100.162	105.02	96.417	107.696
13:25	MA35341-CCVA3	91.155	94.284	98.821	92.651	94.526	99.911	90.172	104.418
13:30	MA35341-CCB3	99.795	102.061	104.343	103.372	102.133	105.24	99.911	106.176
13:34	MP82918-B2	107.37	105.016	108.592	105.714	104.404	108.558	104.74	108.247
13:39	ZZZZZZ	100.649	101.24	102.515	101.116	101.867	102.653	98.251	104.427
13:43	C36707-1F	95.681	99.004	93.148	91.115	92.109	96.243	89.982	101.721
13:48	MP82918-SD1	103.76	104.298	104.667	101.915	101.254	106.775	101.109	108.664
13:53	FA19379-1	98.524	101.113	86.491	88.703	89.043	90.609	92.76	93.656
13:57	FA19379-1F	103.074	104.214	93.147	91.679	91.896	97.258	95.222	101.507
14:02	ZZZZZZ	109.049	110.316	108.981	101.694	103.919	111.583	100.349	118.697
14:07	ZZZZZZ	106.29	109.924	108.823	102.008	102.628	112.848	100.184	119.3
14:11	ZZZZZZ	112.571	114.096	121.118	116.087	114.951	119.803	110.968	121.216
14:16	MA35341-CCVA4	101.493	104.768	111.181	105.681	105.923	112.479	101.332	118.598
14:20	MA35341-CCB4	112.189	113.552	120.287	115.922	114.32	120.046	111.605	121.358
14:25	ZZZZZZ	106.166	107.326	106.306	100.49	99.557	109.698	99.348	117.645
14:30	ZZZZZZ	105.389	108.458	108.158	100.064	100.367	111.693	98.731	119.143
14:34	ZZZZZZ	104.946	113.41	107.365	98.21	99.664	110.717	96.396	119.257
14:39	ZZZZZZ	103.949	107.452	106.388	99.811	101.481	109.943	98.477	117.868
14:44	ZZZZZZ	105.453	106.753	108.855	100.822	101.801	112.016	98.337	120.09
14:48	MP82918-PS1	107.751	109.047	109.377	102.348	103.684	113.024	99.622	119.637
14:53	ZZZZZZ	114.206	114.196	121.428	115.424	114.655	120.848	111.301	122.229
14:58	MA35341-CCVA5	103.702	106.077	114.272	105.146	107.006	116.634	100.794	121.078
15:02	MA35341-CCB5	113.786	113.986	120.375	115.834	114.327	121.61	112.115	122.219
15:07	MP82918-S1	123.902	118.052	125.937	120.352	117.39	127.105	119.664	125.251
15:11	MP82918-S2	121.31	117.075	124.304	117.748	115.435	124.661	117.013	122.531
15:16	C36707-1F	116.328	114.607	116.898	111.435	111.168	120.357	111.338	120.743
15:21	MP82918-SD1	122.678	119.562	123.892	118.579	117.045	125.4	118.116	123.691
15:25	C36707-1F	124.619	121.419	127.736	122.712	120.217	129.11	121.838	127.228
15:30	MP82918-SD1	124.973	120.176	127.71	124.2	119.297	128.423	122.28	125.859
15:34	ZZZZZZ	111.501	115.824	120.998	113.703	116.355	121.468	109.521	121.737
15:39	MA35341-CCVA6	107.032	108.126	109.962	107.589	108.206	112.329	103.363	118.273
15:44	MA35341-CCB6	116.726	115.428	121.28	115.934	116.598	122.114	111.611	122.946
15:48	MP82918-PS1	117.349	115.844	117.085	112.473	111.951	120.25	111.599	121.896

INTERNAL STANDARD SUMMARY

Login Number: FA19379
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA110614M1L.CSV Date Analyzed: 11/06/14 Methods: SW846 6020A
Analyst: VC Run ID: MA35341
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
15:53	ZZZZZZ	119.969	121.219	124.731	118.153	119.819	126.214	118.534	123.2
15:57	FA19379-1	118.322	117.53	110.865	109.151	107.704	114.002	110.792	116.144
16:02	FA19379-1	120.448	120.307	118.373	114.467	112.73	121.547	115.589	121.197
16:07	ZZZZZZ	125.679	123.397	128.153	122.681	119.895	129.969	122.783	128.022
16:11	FA19379-1F	119.534	117.835	111.963	110.204	108.515	115.632	113.052	117.652
16:16	FA19379-1F	123.457	119.93	119.671	115.689	112.926	122.586	117.466	122.774
16:21	ZZZZZZ	126.048	121.743	126.593	120.538	117.472	129.148	120.116	126.39
16:25	MP82918-PS1	123.47	120.445	124.241	119.907	117.216	125.731	119.183	124.535
16:30	MA35341-CCVA7	109.761	111.831	110.072	107.78	107.042	111.733	103.964	118.081
16:35	MA35341-CCB7	114.464	110.675	121.037	117.616	110.722	120.623	112.81	121.461
16:39	ZZZZZZ	114.979	113.247	118.992	115.11	114.274	119.772	111.351	120.755
16:48	FA19379-1	125.077	120.919	123.588	119.497	117.41	126.627	120.556	123.578
16:52	FA19379-1F	123.683	121.427	125.06	119.871	117.68	127.116	120.071	124.048
16:57	ZZZZZZ	113.759	114.107	120.638	114.124	113.098	120.526	109.687	121.583
17:02	ZZZZZZ	114.827	114.705	118.865	113.918	113.394	118.795	110.329	120.003
17:06	MA35341-CRIB2	115.063	112.774	118.507	113.44	113.232	119.886	110.553	120.221
17:11	MA35341-CCVA8	107.323	107.9	113.279	104.798	103.988	115.615	100.515	120.873
17:16	MA35341-CCB8	114.824	114.768	119.092	114.114	113.797	119.574	109.372	119.819
17:20	ZZZZZZ	109.623	108.042	112.332	104.168	104.228	114.514	100.533	119.933
17:25	ZZZZZZ	114.14	113.709	117.538	113.435	113.014	118.304	110.181	119.289
17:29	ZZZZZZ	115.191	113.636	117.962	114.4	113.086	118.503	110.26	118.959
17:34	ZZZZZZ	113.449	113.675	117.084	114.378	113.127	117.736	110.239	118.641
17:39	ZZZZZZ	113.223	115.261	116.803	113.983	113.315	117.048	109.824	117.89
17:43	ZZZZZZ	113.208	113.18	116.402	113.863	112.137	117.178	109.907	117.301

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#9	Germanium (74-2)	70-130 %	70-130 %
Istd#10	Germanium (74-3)	70-130 %	70-130 %
Istd#11	Rhodium (103-1)	70-130 %	70-130 %
Istd#12	Rhodium (103-2)	70-130 %	70-130 %
Istd#13	Rhodium (103-3)	70-130 %	70-130 %
Istd#14	Indium (115-1)	70-130 %	70-130 %
Istd#15	Indium (115-2)	70-130 %	70-130 %
Istd#16	Terbium (159-1)	70-130 %	70-130 %

INTERNAL STANDARD SUMMARY

Login Number: FA19379
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA110614M1L.CSV Date Analyzed: 11/06/14 Methods: SW846 6020A
Analyst: VC Run ID: MA35341
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
10:43	MA35341-STD1	100	100	100	100	100	100
10:48	MA35341-STD2	100	100	100	100	100	100
10:52	MA35341-STD3	100	100	100	100	100	100
10:57	MA35341-STD4	99.913	100.232	99.463	100.066	100.707	99.77
11:01	MA35341-STD5	99.089	101.081	100.17	99.353	100.97	100.004
11:06	MA35341-STD6	100.069	100.232	101.37	100.09	101.481	100.697
11:11	MA35341-STD7	99.546	99.497	100.129	98.904	100.994	99.877
11:15	MA35341-STD8	99.93	100.906	101.209	100.215	101.584	100.141
11:20	MA35341-STD9	100.926	101.874	102.564	101.116	103.74	100.734
11:24	MA35341-STD10	100.423	101.034	102.374	100.576	102.523	100.201
11:29	MA35341-STD11	99.678	99.818	101.473	100.303	100.317	96.777
11:34	MA35341-STD12	98.889	99.787	101.754	99.082	97.349	95.391
11:38	MA35341-STD13	100.412	101.992	103.042	99.822	103.315	99.342
11:47	MA35341-STD14	101.559	102.563	103.989	101.543	103.289	101.34
11:52	MA35341-ICV1	No results reported for the elements associated with this internal standard.					
11:56	MA35341-ICVA1	100.275	102.217	102.983	100.794	100.339	97.84
12:01	MA35341-ICB1	101.088	102.496	102.982	101.223	102.89	100.583
12:06	MA35341-CRIB1	100.275	102.227	104.128	101.254	103.193	99.791
12:10	MA35341-CCVA1	95.692	98.462	99.111	96.595	96.026	93.045
12:15	MA35341-CCB1	100.652	102.805	104.082	100.808	104.439	100.123
12:19	MA35341-ICSA1	94.473	94.432	96.599	95.316	87.853	86.875
12:24	MA35341-ICSAB1	94.592	93.633	98.14	95.187	89.563	86.6
12:29	ZZZZZZ	102.088	104.915	106.026	101.809	105.695	101.516
12:33	MA35341-CCVA2	97.891	101.92	102.853	98.511	99.225	94.621
12:38	MA35341-CCB2	102.575	105.437	107.201	102.011	107.7	102.495
12:43	MP82918-MB1	96.614	102.368	104.439	97.152	105.235	97.308
12:47	ZZZZZZ	98.61	102.402	102.995	98.072	102.38	97.464
12:52	MP82918-B1	104.21	106.268	108.194	104.782	109.023	103.409
12:56	ZZZZZZ	105.274	106.623	111.143	105.3	110.219	104.455
13:02	MP82918-S1	104.246	105.97	108.863	104.668	108.039	102.509
13:06	MP82918-S2	103.944	106.04	109.23	103.79	106.67	102.834
13:11	ZZZZZZ	104.586	106.345	109.833	104.6	109.033	104.265
13:16	ZZZZZZ	101.421	104.23	106.321	101.004	105.247	100.183

INTERNAL STANDARD SUMMARY

Login Number: FA19379
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA110614M1L.CSV Date Analyzed: 11/06/14 Methods: SW846 6020A
Analyst: VC Run ID: MA35341
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
13:20	MP82918-MB2	100.252	103.886	108.072	99.78	107.997	99.036
13:25	MA35341-CCVA3	93.971	100.983	105.379	94.19	100.848	92.095
13:30	MA35341-CCB3	100.813	104.374	106.1	101.21	105.638	100.069
13:34	MP82918-B2	104.329	106.944	108.696	104.869	108.03	103.119
13:39	ZZZZZZ	99.477	103.673	104.614	99.679	103.619	100.591
13:43	C36707-1F	95.485	100.328	103.19	96.216	96.174	90.118
13:48	MP82918-SD1	102.99	106.115	109.33	103.322	106.09	99.819
13:53	FA19379-1	94.31	97.567	94.353	94.831	83.41	82.613
13:57	FA19379-1F	97.411	100.062	102.337	98.301	90.26	86.151
14:02	ZZZZZZ	106.815	113.008	119.589	107.926	111.452	99.799
14:07	ZZZZZZ	105.76	112.932	120.486	108.253	113.96	101.596
14:11	ZZZZZZ	113.588	118.49	122.501	113.198	121.718	116.65
14:16	MA35341-CCVA4	106.867	113.384	119.19	108.732	114.387	104.183
14:20	MA35341-CCB4	113.262	117.186	123.082	113.988	122.261	116.851
14:25	ZZZZZZ	106.615	110.865	118.943	108.447	110.41	100.032
14:30	ZZZZZZ	107.166	111.946	120.883	107.874	113.191	99.738
14:34	ZZZZZZ	105.701	110.929	120.926	106.759	111.781	97.134
14:39	ZZZZZZ	105.787	111.862	118.85	107.051	110.022	98.027
14:44	ZZZZZZ	106.86	112.916	120.863	107.385	111.422	99.365
14:48	MP82918-PS1	107.9	114.411	120.571	109.18	113.271	101.754
14:53	ZZZZZZ	113.805	118.236	123.938	113.786	122.429	116.282
14:58	MA35341-CCVA5	108.553	115.195	122.289	108.438	119.195	104.111
15:02	MA35341-CCB5	112.197	117.51	122.838	113.572	122.116	117.552
15:07	MP82918-S1	117.556	119.748	125.679	118.212	122.999	121.156
15:11	MP82918-S2	115.271	118.011	123.815	115.799	120.211	119.476
15:16	C36707-1F	111.965	116.485	121.289	113.024	117.771	113.5
15:21	MP82918-SD1	116.843	120.203	123.687	117.253	121.756	119.084
15:25	C36707-1F	119.674	122.898	126.515	119.81	124.252	122.383
15:30	MP82918-SD1	117.047	122.017	126.377	119.018	122.163	123.006
15:34	ZZZZZZ	109.496	119.079	122.888	109.388	120.673	113.671
15:39	MA35341-CCVA6	109.27	115.533	119.596	111.116	115.079	107.356
15:44	MA35341-CCB6	114.292	119.663	123.843	114.246	123.055	116.851
15:48	MP82918-PS1	112.944	118.202	122.542	113.344	118.413	114.044

INTERNAL STANDARD SUMMARY

Login Number: FA19379
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA110614M1L.CSV Date Analyzed: 11/06/14 Methods: SW846 6020A
Analyst: VC Run ID: MA35341
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
15:53	ZZZZZZ	114.615	122.599	123.356	113.487	118.14	117.655
15:57	FA19379-1	110.956	115.239	116.883	111.572	107.765	101.555
16:02	FA19379-1	113.901	118.388	122.001	114.346	115.944	112.435
16:07	ZZZZZZ	119.221	123.211	128.612	120.293	123.719	124.082
16:11	FA19379-1F	112.278	116.228	118.068	113.119	108.129	103.22
16:16	FA19379-1F	115.545	118.516	123.927	116.476	116.502	113.553
16:21	ZZZZZZ	118.397	119.428	127.479	117.885	122.884	120.259
16:25	MP82918-PS1	116.49	119.549	124.71	117.332	120.359	119.27
16:30	MA35341-CCVA7	108.197	114.784	119.351	109.892	113.888	107.777
16:35	MA35341-CCB7	113.732	114.46	122.438	114.194	122.04	118.04
16:39	ZZZZZZ	112.331	117.975	121.722	112.842	121.115	115.653
16:48	FA19379-1	117.52	120.922	123.977	117.908	120.775	121.073
16:52	FA19379-1F	116.94	121.402	124.535	117.307	119.876	120.598
16:57	ZZZZZZ	110.285	115.424	122.81	110.758	119.532	113.794
17:02	ZZZZZZ	111.44	116.256	120.677	111.562	119.351	114.023
17:06	MA35341-CRIB2	111.874	116.525	121.441	111.813	120.054	114.001
17:11	MA35341-CCVA8	106.176	111.173	121.966	107.047	116.914	102.339
17:16	MA35341-CCB8	110.965	116.83	120.912	111.612	120.211	114.79
17:20	ZZZZZZ	107.228	112.008	120.801	107.016	116.096	101.875
17:25	ZZZZZZ	111.324	115.484	119.611	111.423	118.729	113.194
17:29	ZZZZZZ	110.592	115.963	118.966	111.638	117.227	114.247
17:34	ZZZZZZ	110.751	115.316	118.662	110.583	117.738	113.114
17:39	ZZZZZZ	109.245	116.092	118.454	110.232	117.158	113.606
17:43	ZZZZZZ	108.524	115.15	117.79	108.716	117.322	112.044

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#17	Terbium (159-2)	70-130 %	70-130 %
Istd#18	Terbium (159-3)	70-130 %	70-130 %
Istd#19	Holmium (165-1)	70-130 %	70-130 %
Istd#20	Holmium (165-2)	70-130 %	70-130 %
Istd#21	Bismuth (209-1)	70-130 %	70-130 %
Istd#22	Bismuth (209-2)	70-130 %	70-130 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA19379
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA110614M1L.CSV Date Analyzed: 11/06/14 Methods: SW846 6020A
QC Limits: result < LOD Run ID: MA35341 Units: ug/l

Time: / Sample ID:				12:01 ICB1		12:15 CCB1		12:38 CCB2	
Metal	RL	IDL	LOD	raw	final	raw	final	raw	final
Aluminum	25	.27	20	0.19	<25	0.15	<25	0.51	<25
Antimony	0.50	.25	0.50	-0.029	<0.50	-0.043	<0.50	0.042	<2.0
Arsenic	0.50	.016	0.40	0.013	<0.50	0.00040	<0.50	0.014	<1.5
Barium	1.0	.0015	0.50	0.0058	<1.0	0.0017	<1.0	0.0040	<1.0
Beryllium	0.50	.003	0.25	0.0068	<0.50	0.0047	<0.50	0.00079	<0.50
Boron	5.0	.58	2.5						
Cadmium	0.50	.0068	0.30	0.0031	<0.50	0.0055	<0.50	0.0038	<3.0
Calcium	250	.86	50	-3.1	<250	-4.2	<250	-6.8	<250
Chromium	1.0	.019	0.50	-0.0077	<1.0	-0.019	<1.0	-0.016	<4.0
Cobalt	0.50	.0033	0.25	0.0066	<0.50	0.0032	<0.50	0.0013	<0.50
Copper	1.0	.023	0.50	-0.012	<1.0	-0.013	<1.0	-0.020	<4.0
Iron	25	.16	13	0.30	<25	0.17	<25	0.46	<25
Lead	0.50	.0083	0.25	0.023	<0.50	0.018	<0.50	0.013	<1.5
Magnesium	250	.16	130	0.22	<250	0.23	<250	0.52	<250
Manganese	1.0	.0093	0.50	0.0013	<1.0	0.0045	<1.0	0.00042	<2.0
Molybdenum	1.0	.029	0.50						
Nickel	1.0	.017	1.0	0.0066	<1.0	0.0029	<1.0	0.00086	<4.0
Potassium	250	2.3	50	-3.8	<250	-4.9	<250	-4.1	<250
Selenium	0.50	.016	0.50	0.020	<0.50	-0.0069	<0.50	0.051	<1.0
Silver	0.50	.0043	0.25	0.012	<0.50	0.013	<0.50	0.014	<1.0
Sodium	250	2.6	50	-1.4	<250	-1.6	<250	0.53	<250
Strontium	5.0	.0034	2.5						
Thallium	0.50	.0069	0.35	0.047	<0.50	0.031	<0.50	0.036	<1.0
Tin	5.0	.02	2.5						
Titanium	1.0	.044	0.50						
Vanadium	1.0	.028	0.50	0.00081	<1.0	0.0052	<1.0	-0.017	<1.5
Zinc	2.0	.049	1.5	0.025	<2.0	0.032	<2.0	-0.013	<4.0

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA19379
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA110614M1L.CSV Date Analyzed: 11/06/14 Methods: SW846 6020A
QC Limits: result < LOD Run ID: MA35341 Units: ug/l

Time: / Sample ID:				13:30 CCB3		14:20 CCB4		15:02 CCB5	
Metal	RL	IDL	LOD	raw	final	raw	final	raw	final
Aluminum	25	.27	20	0.17	<25	0.14	<25	0.24	<25
Antimony	0.50	.25	0.50	0.080	<2.0	0.011	<2.0	0.011	<2.0
Arsenic	0.50	.016	0.40	0.017	<1.5	0.011	<1.5	0.020	<1.5
Barium	1.0	.0015	0.50	0.0052	<1.0	0.0014	<1.0	-0.0015	<1.0
Beryllium	0.50	.003	0.25	0.0097	<0.50	0.0026	<0.50	0.0046	<0.50
Boron	5.0	.58	2.5						
Cadmium	0.50	.0068	0.30	0.0055	<3.0	0.0039	<3.0	0.00033	<3.0
Calcium	250	.86	50	-7.4	<250	-9.4	<250	-9.4	<250
Chromium	1.0	.019	0.50	-0.017	<4.0	-0.024	<4.0	-0.023	<4.0
Cobalt	0.50	.0033	0.25	0.0035	<0.50	0.0014	<0.50	0.0018	<0.50
Copper	1.0	.023	0.50	-0.014	<4.0	-0.032	<4.0	-0.028	<4.0
Iron	25	.16	13	0.18	<25	0.10	<25	0.29	<25
Lead	0.50	.0083	0.25	0.018	<1.5	0.0060	<1.5	0.0077	<1.5
Magnesium	250	.16	130	0.30	<250	0.32	<250	1.1	<250
Manganese	1.0	.0093	0.50	0.0049	<2.0	0.021	<2.0	0.073	<2.0
Molybdenum	1.0	.029	0.50						
Nickel	1.0	.017	1.0	-0.0094	<4.0	0.0014	<4.0	0.0094	<4.0
Potassium	250	2.3	50	-4.7	<250	-8.1	<250	-8.8	<250
Selenium	0.50	.016	0.50	0.058	<1.0	0.017	<1.0	0.015	<1.0
Silver	0.50	.0043	0.25	0.016	<1.0	0.014	<1.0	0.014	<1.0
Sodium	250	2.6	50	-0.12	<250	8.8	<250	5.1	<250
Strontium	5.0	.0034	2.5						
Thallium	0.50	.0069	0.35	0.044	<1.0	0.035	<1.0	0.036	<1.0
Tin	5.0	.02	2.5						
Titanium	1.0	.044	0.50						
Vanadium	1.0	.028	0.50	-0.00021	<1.5	0.011	<1.5	0.014	<1.5
Zinc	2.0	.049	1.5	0.0062	<4.0	-0.019	<4.0	-0.0093	<4.0

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA19379
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA110614M1L.CSV Date Analyzed: 11/06/14 Methods: SW846 6020A
QC Limits: result < LOD Run ID: MA35341 Units: ug/l

Time: / Sample ID:				15:44 CCB6		16:35 CCB7		17:16 CCB8	
Metal	RL	IDL	LOD	raw	final	raw	final	raw	final
Aluminum	25	.27	20	0.046	<25	0.17	<25	0.43	<25
Antimony	0.50	.25	0.50	0.044	<2.0	0.073	<2.0	0.015	<2.0
Arsenic	0.50	.016	0.40	0.017	<1.5	0.013	<1.5	0.015	<1.5
Barium	1.0	.0015	0.50	-0.00064	<1.0	0.0053	<1.0	0.013	<1.0
Beryllium	0.50	.003	0.25	-0.00014	<0.50	0.0011	<0.50	0.0026	<0.50
Boron	5.0	.58	2.5						
Cadmium	0.50	.0068	0.30	0.0024	<3.0	-0.00034	<3.0	0.0019	<3.0
Calcium	250	.86	50	-9.3	<250	-9.0	<250	-8.0	<250
Chromium	1.0	.019	0.50	-0.035	<4.0	-0.023	<4.0	-0.018	<4.0
Cobalt	0.50	.0033	0.25	0.0031	<0.50	0.0017	<0.50	0.0051	<0.50
Copper	1.0	.023	0.50	-0.043	<4.0	-0.044	<4.0	-0.040	<4.0
Iron	25	.16	13	0.039	<25	0.12	<25	0.32	<25
Lead	0.50	.0083	0.25	0.0051	<1.5	0.0052	<1.5	0.0098	<1.5
Magnesium	250	.16	130	0.27	<250	0.34	<250	0.46	<250
Manganese	1.0	.0093	0.50	0.025	<2.0	0.026	<2.0	0.025	<2.0
Molybdenum	1.0	.029	0.50						
Nickel	1.0	.017	1.0	-0.010	<4.0	0.013	<4.0	0.0011	<4.0
Potassium	250	2.3	50	-8.1	<250	-9.3	<250	-7.4	<250
Selenium	0.50	.016	0.50	0.013	<1.0	-0.0038	<1.0	-0.0072	<1.0
Silver	0.50	.0043	0.25	0.013	<1.0	0.014	<1.0	0.015	<1.0
Sodium	250	2.6	50	1.1	<250	6.1	<250	4.3	<250
Strontium	5.0	.0034	2.5						
Thallium	0.50	.0069	0.35	0.037	<1.0	0.033	<1.0	0.043	<1.0
Tin	5.0	.02	2.5						
Titanium	1.0	.044	0.50						
Vanadium	1.0	.028	0.50	0.011	<1.5	0.013	<1.5	0.0066	<1.5
Zinc	2.0	.049	1.5	-0.0081	<4.0	-0.030	<4.0	-0.013	<4.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA19379
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA110614M1L.CSV Date Analyzed: 11/06/14 Methods: SW846 6020A
QC Limits: 90 to 110 % Recovery Run ID: MA35341 Units: ug/l

Time: / Sample ID: / Metal	ICVA True	11:56 ICVA1 Results	% Rec	CCVA True	12:10 CCVA1 Results	% Rec	CCVA True	12:33 CCVA2 Results	% Rec
Aluminum	5500	5520	100.4	5000	4920	98.4	5000	4790	95.8
Antimony	60	59.3	98.8	50	50.7	101.4	50	50.1	100.2
Arsenic	60	57.5	95.8	50	49.1	98.2	50	48.9	97.8
Barium	60	58.6	97.7	50	49.8	99.6	50	48.3	96.6
Beryllium	60	58.5	97.5	50	51.1	102.2	50	50.4	100.8
Boron									
Cadmium	60	59.4	99.0	50	51.2	102.4	50	50.7	101.4
Calcium	5500	5440	98.9	5000	5000	100.0	5000	4960	99.2
Chromium	60	57.5	95.8	50	51.5	103.0	50	51.2	102.4
Cobalt	60	57.9	96.5	50	49.7	99.4	50	49.4	98.8
Copper	60	56.8	94.7	50	50.1	100.2	50	49.6	99.2
Iron	5500	5500	100.0	5000	5030	100.6	5000	4970	99.4
Lead	60	59.8	99.7	50	50.9	101.8	50	50.5	101.0
Magnesium	5500	5520	100.4	5000	5030	100.6	5000	4970	99.4
Manganese	60	57.7	96.2	50	50.6	101.2	50	50.1	100.2
Molybdenum									
Nickel	60	58.1	96.8	50	50.3	100.6	50	49.6	99.2
Potassium	5500	5510	100.2	5000	4980	99.6	5000	4890	97.8
Selenium	60	58.9	98.2	50	48.0	96.0	50	49.2	98.4
Silver	60	59.3	98.8	50	50.4	100.8	50	50.1	100.2
Sodium	5500	5500	100.0	5000	5070	101.4	5000	5000	100.0
Strontium									
Thallium	60	60.1	100.2	50	50.9	101.8	50	50.6	101.2
Tin									
Titanium									
Vanadium	60	59.3	98.8	50	51.5	103.0	50	51.0	102.0
Zinc	60	57.6	96.0	50	48.8	97.6	50	48.6	97.2

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA19379
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA110614M1L.CSV Date Analyzed: 11/06/14 Methods: SW846 6020A
QC Limits: 90 to 110 % Recovery Run ID: MA35341 Units: ug/l

Time:		13:25			14:16			14:58	
Sample ID:	CCVA	CCVA3		CCVA	CCVA4		CCVA	CCVA5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5000	5030	100.6	5000	4840	96.8	5000	4850	97.0
Antimony	50	49.0	98.0	50	48.7	97.4	50	48.5	97.0
Arsenic	50	50.8	101.6	50	49.0	98.0	50	50.2	100.4
Barium	50	47.9	95.8	50	47.9	95.8	50	48.3	96.6
Beryllium	50	49.6	99.2	50	49.2	98.4	50	48.1	96.2
Boron									
Cadmium	50	52.6	105.2	50	51.2	102.4	50	52.7	105.4
Calcium	5000	4830	96.6	5000	4910	98.2	5000	4850	97.0
Chromium	50	53.3	106.6	50	51.8	103.6	50	52.8	105.6
Cobalt	50	52.3	104.6	50	50.7	101.4	50	51.4	102.8
Copper	50	51.4	102.8	50	50.5	101.0	50	51.1	102.2
Iron	5000	5240	104.8	5000	5110	102.2	5000	5100	102.0
Lead	50	49.8	99.6	50	50.8	101.6	50	49.3	98.6
Magnesium	5000	5180	103.6	5000	5030	100.6	5000	5070	101.4
Manganese	50	52.0	104.0	50	50.7	101.4	50	51.2	102.4
Molybdenum									
Nickel	50	51.9	103.8	50	50.6	101.2	50	52.0	104.0
Potassium	5000	5160	103.2	5000	4970	99.4	5000	4960	99.2
Selenium	50	49.7	99.4	50	50.5	101.0	50	50.4	100.8
Silver	50	49.1	98.2	50	49.8	99.6	50	48.5	97.0
Sodium	5000	5240	104.8	5000	5060	101.2	5000	5080	101.6
Strontium									
Thallium	50	50.1	100.2	50	50.9	101.8	50	49.1	98.2
Tin									
Titanium									
Vanadium	50	53.2	106.4	50	51.8	103.6	50	52.9	105.8
Zinc	50	49.9	99.8	50	49.1	98.2	50	49.5	99.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA19379
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA110614M1L.CSV Date Analyzed: 11/06/14 Methods: SW846 6020A
QC Limits: 90 to 110 % Recovery Run ID: MA35341 Units: ug/l

Time:		15:39			16:30			17:11	
Sample ID:	CCVA	CCVA6		CCVA	CCVA7		CCVA	CCVA8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5000	4780	95.6	5000	4760	95.2	5000	4770	95.4
Antimony	50	49.6	99.2	50	49.6	99.2	50	47.7	95.4
Arsenic	50	48.9	97.8	50	48.4	96.8	50	48.9	97.8
Barium	50	48.7	97.4	50	48.5	97.0	50	46.9	93.8
Beryllium	50	50.0	100.0	50	49.9	99.8	50	48.7	97.4
Boron									
Cadmium	50	51.4	102.8	50	51.1	102.2	50	52.0	104.0
Calcium	5000	4990	99.8	5000	4930	98.6	5000	4790	95.8
Chromium	50	50.8	101.6	50	50.5	101.0	50	50.5	101.0
Cobalt	50	49.2	98.4	50	49.2	98.4	50	49.3	98.6
Copper	50	49.3	98.6	50	48.7	97.4	50	48.6	97.2
Iron	5000	5050	101.0	5000	4980	99.6	5000	5020	100.4
Lead	50	51.4	102.8	50	51.1	102.2	50	49.0	98.0
Magnesium	5000	4950	99.0	5000	4900	98.0	5000	4940	98.8
Manganese	50	50.2	100.4	50	50.0	100.0	50	49.7	99.4
Molybdenum									
Nickel	50	49.6	99.2	50	48.8	97.6	50	49.1	98.2
Potassium	5000	4900	98.0	5000	4910	98.2	5000	4910	98.2
Selenium	50	49.1	98.2	50	47.2	94.4	50	48.2	96.4
Silver	50	49.5	99.0	50	49.7	99.4	50	47.7	95.4
Sodium	5000	4950	99.0	5000	4920	98.4	5000	4980	99.6
Strontium									
Thallium	50	50.5	101.0	50	50.7	101.4	50	48.6	97.2
Tin									
Titanium									
Vanadium	50	50.9	101.8	50	50.7	101.4	50	50.6	101.2
Zinc	50	47.4	94.8	50	47.5	95.0	50	47.8	95.6

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA19379
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA110614M1L.CSV Date Analyzed: 11/06/14 Methods: SW846 6020A
QC Limits: 80 to 120 % Recovery Run ID: MA35341 Units: ug/l

Time: / Sample ID: / Metal	CRIB True	12:06 CRIB1 Results	% Rec	17:06 CRIB2 Results	% Rec
Aluminum	25	23.7	94.8	22.9	91.6
Antimony	0.50	0.51	102.0	0.59	118.0
Arsenic	0.50	0.46	92.0	0.50	100.0
Barium	1.0	1.0	100.0	1.0	100.0
Beryllium	0.50	0.48	96.0	0.48	96.0
Boron	5.0				
Cadmium	0.50	0.50	100.0	0.48	96.0
Calcium	250	228	91.2	220	88.0
Chromium	1.0	1.0	100.0	1.1	110.0
Cobalt	0.50	0.49	98.0	0.51	102.0
Copper	1.0	0.99	99.0	0.98	98.0
Iron	25	24.3	97.2	24.2	96.8
Lead	0.50	0.50	100.0	0.47	94.0
Magnesium	250	236	94.4	233	93.2
Manganese	0.50	0.48	96.0	0.51	102.0
Molybdenum	1.0				
Nickel	1.0	1.0	100.0	1.0	100.0
Potassium	250	229	91.6	228	91.2
Selenium	0.50	0.52	104.0	0.50	100.0
Silver	0.50	0.48	96.0	0.48	96.0
Sodium	250	230	92.0	236	94.4
Strontium	5.0				
Thallium	0.50	0.48	96.0	0.46	92.0
Tin	5.0				
Titanium	1.0				
Vanadium	1.0	1.0	100.0	1.0	100.0
Zinc	2.0	2.0	100.0	2.0	100.0

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA19379
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

File ID: XA110614M1L.CSV Date Analyzed: 11/06/14 Methods: SW846 6020A
QC Limits: 80 to 120 % Recovery Run ID: MA35341 Units: ug/l

Time: / Sample ID: / Metal	ICSA True	ICSAB True	12:19 ICSA1 Results	% Rec	12:24 ICSAB1 Results	% Rec
Aluminum	100000	100000	87800	87.8	89900	89.9
Antimony			0.012		0.040	
Arsenic		20	0.059		18.9	94.5
Barium			0.082		0.090	
Beryllium			0.0097		0.0095	
Boron			1.1		0.57	
Cadmium		20	0.43		19.6	98.0
Calcium	100000	100000	87200	87.2	89100	89.1
Chromium		20	1.2		19.9	99.5
Cobalt		20	0.017		18.1	90.5
Copper		20	0.55		17.6	88.0
Iron	100000	100000	87700	87.7	90400	90.4
Lead			0.20		0.19	
Magnesium	100000	100000	86800	86.8	89300	89.3
Manganese		20	0.43		19.4	97.0
Molybdenum	2000	2000	1970	98.5	2020	101.0
Nickel		20	0.11		17.6	88.0
Potassium	100000	100000	89000	89.0	91300	91.3
Selenium		20	0.013		22.4	112.0
Silver		20	0.017		18.2	91.0
Sodium	100000	100000	88200	88.2	90100	90.1
Strontium			0.63		0.66	
Thallium			0.0070		0.0079	
Tin			0.049		0.030	
Titanium	2000	2000	1870	93.5	1920	96.0
Vanadium		20	-0.0081		19.8	99.0
Zinc		20	0.82		18.6	93.0

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA19379
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

QC Batch ID: MP82918
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date:				10/31/14		10/31/14	
Metal	RL	IDL	MDL	MB raw	final	MB raw	final
Aluminum	50	.54	3.2	5.2	<50	7.3	<50
Antimony	4.0	.51	.12	0.38	<4.0	0.97	<4.0
Arsenic	3.0	.032	.23	0.066	<3.0	0.19	<3.0
Barium	2.0	.003	.2	0.011	<2.0	0.24	<2.0
Beryllium	1.0	.006	.026	-0.0011	<1.0	0.013	<1.0
Boron	10	1.2	1.3				
Cadmium	6.0	.014	.22	-0.0011	<6.0	0.012	<6.0
Calcium	500	1.7	8.5	-13	<500	27.4	<500
Chromium	8.0	.037	.3	0.12	<8.0	0.33	<8.0
Cobalt	1.0	.0066	.038	0.00092	<1.0	0.010	<1.0
Copper	8.0	.046	.22	0.16	<8.0	0.33	<8.0
Iron	50	.32	6.3	2.3	<50	10.1	<50
Lead	3.0	.017	.027	0.0078	<3.0	0.070	<3.0
Magnesium	500	.32	.73	6.8	<500	12.9	<500
Manganese	4.0	.019	.11	0.025	<4.0	0.25	<4.0
Molybdenum	2.0	.058	.17				
Nickel	8.0	.035	.062	-0.040	<8.0	0.038	<8.0
Potassium	500	4.6	6.7	2.3	<500	-3.6	<500
Selenium	2.0	.032	.087	0.14	<2.0	0.23	<2.0
Silver	2.0	.0086	.1	0.014	<2.0	0.018	<2.0
Sodium	500	5.2	4.9	7.4	<500	40.8	<500
Strontium	20	.0068	.028				
Thallium	2.0	.014	.17	0.0068	<2.0	0.039	<2.0
Tin	10	.04	.25				
Titanium	2.0	.089	.84				
Vanadium	3.0	.057	.23	0.14	<3.0	0.19	<3.0
Zinc	12	.098	.93	0.37	<12	5.8	<12

Associated samples MP82918: FA19379-1, FA19379-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA19379
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

QC Batch ID: MP82918
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date: 10/31/14

Metal	C36707-1F Original	MS	Spikelot MPSPK	% Rec	QC Limits
Aluminum	1250	25400	25000	96.6	75-125
Antimony	0.88	2060	2000	103.0	75-125
Arsenic	0.55	1920	2000	96.0	75-125
Barium	53.6	2050	2000	99.8	75-125
Beryllium	0.030	2010	2000	100.5	75-125
Boron					
Cadmium	0.0	2030	2000	101.5	75-125
Calcium	50600	79300	25000	114.8	75-125
Chromium	2.5	2000	2000	99.9	75-125
Cobalt	10.5	1980	2000	98.5	75-125
Copper	1.3	1960	2000	97.9	75-125
Iron	18100	42800	25000	98.8	75-125
Lead	0.25	2010	2000	100.5	75-125
Magnesium	45700	72800	25000	108.4	75-125
Manganese	2530	4530	2000	100.0	75-125
Molybdenum					
Nickel	5.3	1980	2000	98.7	75-125
Potassium	5810	30300	25000	98.0	75-125
Selenium	0.34	2090	2000	104.5	75-125
Silver	0.024	228	250	91.2	75-125
Sodium	72900	102000	25000	116.4	75-125
Strontium					
Thallium	0.10	1940	2000	97.0	75-125
Tin					
Titanium					
Vanadium	5.0	2010	2000	100.3	75-125
Zinc	13.4	2000	2000	99.3	75-125

Associated samples MP82918: FA19379-1, FA19379-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA19379
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

QC Batch ID: MP82918
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date: 10/31/14

Metal	C36707-1F Original	MSD	Spikelot MPSPK	% Rec	MSD RPD	QC Limit
Aluminum	1250	25200	25000	95.8	0.8	20
Antimony	0.88	2150	2000	107.5	4.3	20
Arsenic	0.55	2010	2000	100.5	4.6	20
Barium	53.6	2140	2000	104.3	4.3	20
Beryllium	0.030	2090	2000	104.5	3.9	20
Boron						
Cadmium	0.0	2120	2000	106.0	4.3	20
Calcium	50600	79800	25000	116.8	0.6	20
Chromium	2.5	2090	2000	104.4	4.4	20
Cobalt	10.5	2060	2000	102.5	4.0	20
Copper	1.3	2030	2000	101.4	3.5	20
Iron	18100	43000	25000	99.6	0.5	20
Lead	0.25	2120	2000	106.0	5.3	20
Magnesium	45700	73600	25000	111.6	1.1	20
Manganese	2530	4930	2000	120.0	8.5	20
Molybdenum						
Nickel	5.3	2070	2000	103.2	4.4	20
Potassium	5810	30600	25000	99.2	1.0	20
Selenium	0.34	2190	2000	109.5	4.7	20
Silver	0.024	236	250	94.4	3.4	20
Sodium	72900	104000	25000	124.4	1.9	20
Strontium						
Thallium	0.10	2040	2000	102.0	5.0	20
Tin						
Titanium						
Vanadium	5.0	2110	2000	105.3	4.9	20
Zinc	13.4	2110	2000	104.8	5.4	20

Associated samples MP82918: FA19379-1, FA19379-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA19379
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

QC Batch ID: MP82918
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date:			10/31/14				10/31/14	
Metal	BSP Result	Spikelot MPSPK	% Rec	QC Limits	BSP Result	Spikelot MPSPK	% Rec	QC Limits
Aluminum	25100	25000	100.4	80-120	23700	25000	94.8	80-120
Antimony	2140	2000	107.0	80-120	1970	2000	98.5	80-120
Arsenic	1990	2000	99.5	80-120	1860	2000	93.0	80-120
Barium	2050	2000	102.5	80-120	1920	2000	96.0	80-120
Beryllium	2040	2000	102.0	80-120	1890	2000	94.5	80-120
Boron								
Cadmium	2090	2000	104.5	80-120	1950	2000	97.5	80-120
Calcium	25700	25000	102.8	80-120	24100	25000	96.4	80-120
Chromium	2060	2000	103.0	80-120	1940	2000	97.0	80-120
Cobalt	2040	2000	102.0	80-120	1890	2000	94.5	80-120
Copper	2060	2000	103.0	80-120	1930	2000	96.5	80-120
Iron	25600	25000	102.4	80-120	23800	25000	95.2	80-120
Lead	2080	2000	104.0	80-120	1930	2000	96.5	80-120
Magnesium	25200	25000	100.8	80-120	23800	25000	95.2	80-120
Manganese	2050	2000	102.5	80-120	1930	2000	96.5	80-120
Molybdenum								
Nickel	2060	2000	103.0	80-120	1920	2000	96.0	80-120
Potassium	24900	25000	99.6	80-120	23400	25000	93.6	80-120
Selenium	2140	2000	107.0	80-120	1990	2000	99.5	80-120
Silver	238	250	95.2	80-120	222	250	88.8	80-120
Sodium	24900	25000	99.6	80-120	23400	25000	93.6	80-120
Strontium								
Thallium	1970	2000	98.5	80-120	1830	2000	91.5	80-120
Tin								
Titanium								
Vanadium	2060	2000	103.0	80-120	1920	2000	96.0	80-120
Zinc	2100	2000	105.0	80-120	1990	2000	99.5	80-120

Associated samples MP82918: FA19379-1, FA19379-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA19379
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

QC Batch ID: MP82918
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date: 10/31/14

Metal	C36707-1F Original	SDL 2:10	%DIF	QC Limits
Aluminum	1250	1320	5.2	0-10
Antimony	0.877	0.00	100.0(a)	0-10
Arsenic	0.552	0.348	37.0 (a)	0-10
Barium	53.6	55.4	3.2	0-10
Beryllium	0.0301	0.0472	56.7 (a)	0-10
Boron				
Cadmium	0.00	0.00	NC	0-10
Calcium	50600	52300	3.3	0-10
Chromium	2.46	1.76	28.4*(b)	0-10
Cobalt	10.5	10.9	3.9	0-10
Copper	1.32	0.938	29.1 (a)	0-10
Iron	18100	18600	2.8	0-10
Lead	0.249	0.190	23.5 (a)	0-10
Magnesium	45700	46100	0.8	0-10
Manganese	2530	2340	7.7	0-10
Molybdenum				
Nickel	5.30	5.36	1.2	0-10
Potassium	5810	5840	0.6	0-10
Selenium	0.340	0.533	56.8 (a)	0-10
Silver	0.0238	0.0545	128.7(a)	0-10
Sodium	72900	75100	3.1	0-10
Strontium				
Thallium	0.0997	0.155	55.9 (a)	0-10
Tin				
Titanium				
Vanadium	5.04	4.82	4.3	0-10
Zinc	13.4	14.2	6.5	0-10

Associated samples MP82918: FA19379-1, FA19379-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
(b) Serial dilution indicates possible matrix interference.

POST DIGESTATE SPIKE SUMMARY

Login Number: FA19379
Account: ALSE - Accutest Laboratories Southeast, Inc.
Project: BBAFLFWB: Melrose Air Force Range, NM

QC Batch ID: MP82918
Matrix Type: AQUEOUS

Methods: SW846 6020A
Units: ug/l

Prep Date: 10/31/14

Metal	Sample ml	Final ml	C36707-1F Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum	9.4	10	1252.243	1177.108	5574.661	0.2	250	5000	88.0	75-125
Antimony	9.4	10	.8767612	.8241555	49.20595	0.2	2.5	50	96.8	75-125
Arsenic	9.4	10	.5516337	.5185357	50.10623	0.2	2.5	50	99.2	75-125
Barium	9.4	10	53.62695	50.40934	94.06145	0.2	2.5	50	87.3	75-125
Beryllium	9.4	10	.03014738	.0283385	447.16643	0.2	2.5	50	94.3	75-125
Boron										
Cadmium	9.4	10			51.2273	0.2	2.5	50	102.5	75-125
Calcium	9.4	10	50635.8	47597.65	51346.29	0.2	250	5000	75.0	75-125
Chromium	9.4	10	2.457708	2.310246	51.89533	0.2	2.5	50	99.2	75-125
Cobalt	9.4	10	10.48988	9.860486	56.78644	0.2	2.5	50	93.9	75-125
Copper	9.4	10	1.322916	1.243541	50.74398	0.2	2.5	50	99.0	75-125
Iron	9.4	10	18120.74	17033.5	21797.59	0.2	250	5000	95.3	75-125
Lead	9.4	10	.2487125	.2337898	47.7799	0.2	2.5	50	95.1	75-125
Magnesium	9.4	10	45718.17	42975.08	45857.5	0.2	250	5000	57.6*(a)	75-125
Manganese	9.4	10	2533.316	2381.317	2159.11	0.2	2.5	50	-444.4*a	75-125
Molybdenum										
Nickel	9.4	10	5.297224	4.979391	52.44658	0.2	2.5	50	94.9	75-125
Potassium	9.4	10	5805.092	5456.787	9922.334	0.2	250	5000	89.3	75-125
Selenium	9.4	10	.340234	.3198199	50.19352	0.2	2.5	50	99.7	75-125
Silver	9.4	10	.02383238	.0224024	452.40123	0.2	2.5	50	104.8	75-125
Sodium	9.4	10	72883.93	68510.89	71818.25	0.2	250	5000	66.1*(a)	75-125
Strontium										
Thallium	9.4	10	.09968694	.0937057	348.11447	0.2	2.5	50	96.0	75-125
Tin										
Titanium										
Vanadium	9.4	10	5.035275	4.733159	55.5188	0.2	2.5	50	101.6	75-125
Zinc	9.4	10	13.36663	12.56463	106.073	0.2	5	100	93.5	75-125

Associated samples MP82918: FA19379-1, FA19379-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested
(a) Spike amount low relative to the sample result.

GCAL
ANALYTICAL LABORATORIES, LLC

NELAP CERTIFICATE NUMBER: 01955
DOD ELAP CERTIFICATE NUMBER: L14-243

ANALYTICAL RESULTS

PERFORMED BY

GCAL, LLC
7979 Innovation Park Dr.
Baton Rouge, LA 70820

Report Date 11/18/2014

GCAL Report 214102205

Deliver To	Trinity A&D 1002 N Eglin Pkwy Shalimar, FL 32579 850-613-6800
Attn	Jonathan Kramer

Project Melrose 2014 Semiannual

PJLA Testing DoD ELAP

ISO 17025

NELAP ACCREDITED TNI LABORATORY

Case Narrative

Client: TRINITY Analysis & Development Corp. **Report:** 214102205

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the Report Sample Summary page of this report. Receipt of the sample(s) is documented
by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

Additional Flags:

Q – non-compliant QC result (see Q Flag Application Form)

DL – Dilution

VOLATILES MASS SPECTROMETRY

In the EPA 8260B analysis for analytical batch 544101, the LCS and/or LCSD recoveries are above the upper control limit for Acetone. The LCS/LCSD RPD is above the control limit for Acetone. This analyte was not detected in the associated samples.

In the EPA 8260B analysis, the recovery for Dichlorodifluoromethane is above the upper control limit in the ICV (MSV8, 10/19/14). This analyte was not detected in the associated samples.

HIGH PERFORMANCE LIQUID CHROMATOGRAPHY

In the EPA 8330A analysis, samples 21410220511 (M114MW003) and 21410220515 (MWQ-24) had to be diluted to bracket the concentration of Nitrobenzene within the calibration range of the instrument. The recovery for the surrogate is reported as D, diluted out. The concentration of Nitrobenzene appears to be non-homogeneous in the matrix for sample 21410220515 (MWQ-24) and the associated MS/MSD (samples 21410220516 (MWQ-24-ms), 21410220517 (MWQ-24-sd)). No dilution was required for the MS/MSD.

In the EPA 8330A analysis for prep batch 543548, the LCS/LCS recoveries are outside control limits for 1,3,5-Trinitrobenzene. The failures fall within the number allowed based on the number of target analytes.

In the EPA 8330A analysis for prep batch 543732, the MS/MSD exhibited recovery and RPD failures. The MS/MSD recoveries for Nitrobenzene are not applicable due to the high concentration of this analyte in the spiked sample. The LCSD recovery and RPD are outside control limits for 1,3,5-Trinitrobenzene. The failures fall within the number allowed based on the number of target analytes. All other LCS/LCSD recoveries and RPDs are acceptable.

METALS

The dissolved concentration for some analytes may be slightly greater than the total concentration of these analytes in several samples. This is attributed to separate aliquots of sample. It can be assumed that these analytes are present in the dissolved state in these samples.

In the EPA 6020A analysis, samples 21410220501 (MA01MW002), 21410220503 (MA01MW001), 21410220504 (MA01MW004), 21410220505 (MA01MW004-a), 21410220507 (MA01MW003), 21410220509 (M114MW002), 21410220511 (M114MW003), 21410220512 (M114MW004) and 21410220514 (M114MW001) 21410220515 (MWQ-24), 21410220516 (MWQ-24-ms), 21410220517 (MWQ-24-sd), and 21410220520 (MA02MW001D) had to be diluted in order to bracket the concentration of target analytes within the calibration range of the instrument. Dilutions may have also been required to eliminate a chemical or physical interference. The dilutions are reflected in elevated detection limits.

In the EPA 6020A analysis for prep batch 543538, the MS and/or MSD recovery is outside the control limits for Thallium. The LCS recovery is within control limits. This indicates the analysis is in control and the sample is affected by matrix interference. The MS/MSD recoveries are not applicable for Sodium and Magnesium because the sample concentration is greater than four times the spike concentration.

In the EPA 6020A analysis for prep batch 543620, the MS and/or MSD recovery is outside the control limits for Selenium. The LCS recovery is within the control limits. This indicates the analysis is in control and the sample is affected by matrix interference. the MS/MSD recoveries are not applicable for Calcium, Magnesium, and Sodium because the sample concentration is greater than four times the spike concentration.

In the EPA 6020A analysis for prep batch 543681, the MS/MSD recoveries are not applicable for Magnesium and Sodium because the sample concentration is greater than four times the spike concentration.

In the EPA 6020A analysis for prep batch 543697, the method blank required re-analysis for Beryllium, Sodium, and Titanium. The re-analysis was performed on ICPMS1, 10/31/14 at 0653. The data for these analytes is included on the same blank form as all other analytes because only one schedule can be entered in the data system for a method blank. The MS/MSD recoveries are not applicable for Magnesium and Sodium because the sample concentration is greater than four times the spike concentration.

In the EPA 7470A analysis for prep batch 543617, the MS and/or MSD recovery is outside the control limits for Mercury. The LCS recovery is within the control limits. This indicates the analysis is in control and the sample is affected by matrix interference.

In the EPA 6020A analysis for analytical batch 544053, the recovery for Sodium is above the upper control limit in several low level CCVs (LLCCV). The concentration detected in the associated samples is greater than the CCV concentration; therefore the data is reportable. Sodium was detected at a concentration > PQL in one CCB but < 10% the concentration detected in the associated sample (ICPMS1, 10/31/14 2251).

In the EPA 6020A analysis for analytical batch 544138, the recovery for Sodium is above the upper control limit in several low level CCVs (LLCCV). The concentration detected in the associated samples is greater than the CCV concentration; therefore the data is reportable.

CONVENTIONALS

In the EPA 353.2 Nitrate analysis, samples 21410220511 (M114MW003), 21410220514 (M114MW001), 21410220515 (MWQ-24), 21410220516 (MWQ-24-ms), 21410220517 (MWQ-24-sd), and 21410220520 (MA02MW001D) had to be diluted in order to bracket the Nitrate + Nitrite and/or Nitrite concentrations within the calibration range of the instrument. The Nitrate is based on the difference between the Nitrate + Nitrite and the Nitrite. The dilution is reflected in the elevated reporting limit.

In the EPA 353.2 Nitrate analysis, a chemical or physical interference necessitated a dilution for samples 21410220504 (MA01MW004) and 21410220505 (MA01MW004-a). This is reflected in the elevated detection limits.

In the EPA 300.0 analysis, all samples had to be diluted in order to bracket the concentration of target analytes within the calibration range of the instrument.

In the EPA 9012B analysis for analytical batch 543876, the MS and/or MSD recovery is outside control limits for Cyanide. The LCS recovery is acceptable. This indicates the analysis is in control and the sample is affected by a matrix interference.

The Sample/Duplicate RPD for Cyanide for prep batch 543680 is not applicable because the sample and/or duplicate concentration is less than five times the reporting limit.

In the SM 2540 C-2011 for analytical batch 543840, the sample/duplicate RPD is above the control limit.

MISCELLANEOUS

See Subcontract report for any case narrative.

Q Flag Summary Report
Lab Work Order ID: **214102205**

Lab Sample ID: **21410220501**

Analysis Date: **10/27/2014 3:45:00 AM**

Analyte	CAS	CCV OUL	LCS/LCSD OUL	SURROGATE OUL	ANALYTE NC	IS OUL	CLCCV OUL
1,3,5-Trinitrobenzene	99-35-4		X				

Lab Sample ID: **21410220503**

Analysis Date: **10/27/2014 4:23:00 AM**

Analyte	CAS	CCV OUL	LCS/LCSD OUL	SURROGATE OUL	ANALYTE NC	IS OUL	CLCCV OUL
1,3,5-Trinitrobenzene	99-35-4		X				

Lab Sample ID: **21410220504**

Analysis Date: **10/27/2014 5:01:00 AM**

Analyte	CAS	CCV OUL	LCS/LCSD OUL	SURROGATE OUL	ANALYTE NC	IS OUL	CLCCV OUL
1,3,5-Trinitrobenzene	99-35-4		X				

Lab Sample ID: **21410220505**

Analysis Date: **10/27/2014 5:39:00 AM**

Analyte	CAS	CCV OUL	LCS/LCSD OUL	SURROGATE OUL	ANALYTE NC	IS OUL	CLCCV OUL
1,3,5-Trinitrobenzene	99-35-4		X				

Lab Sample ID: **21410220507**

Analysis Date: **10/27/2014 6:16:00 AM**

Analyte	CAS	CCV OUL	LCS/LCSD OUL	SURROGATE OUL	ANALYTE NC	IS OUL	CLCCV OUL
1,3,5-Trinitrobenzene	99-35-4		X				

Lab Sample ID: **21410220509**

Analysis Date: **10/30/2014 5:26:00 PM**

Analyte	CAS	CCV OUL	LCS/LCSD OUL	SURROGATE OUL	ANALYTE NC	IS OUL	CLCCV OUL
1,3,5-Trinitrobenzene	99-35-4		X				

Lab Sample ID: **21410220511**

Analysis Date: **11/5/2014 2:44:00 PM**

Analyte	CAS	CCV OUL	LCS/LCSD OUL	SURROGATE OUL	ANALYTE NC	IS OUL	CLCCV OUL
1,3,5-Trinitrobenzene	99-35-4		X				

Lab Sample ID: **21410220512**

Analysis Date: **11/5/2014 1:29:00 PM**

Analyte	CAS	CCV OUL	LCS/LCSD OUL	SURROGATE OUL	ANALYTE NC	IS OUL	CLCCV OUL
1,3,5-Trinitrobenzene	99-35-4		X				

Lab Sample ID: **21410220514**

Analysis Date: **11/5/2014 2:06:00 PM**

Analyte	CAS	CCV OUL	LCS/LCSD OUL	SURROGATE OUL	ANALYTE NC	IS OUL	CLCCV OUL
1,3,5-Trinitrobenzene	99-35-4		X				

Lab Sample ID: **21410220515**

Analysis Date: **10/30/2014 7:58:00 PM**

Analyte	CAS	CCV OUL	LCS/LCSD OUL	SURROGATE OUL	ANALYTE NC	IS OUL	CLCCV OUL
1,3,5-Trinitrobenzene	99-35-4		X				

Lab Sample ID: **21410220520**

Analysis Date: **10/30/2014 9:51:00 PM**

Analyte	CAS	CCV OUL	LCS/LCSD OUL	SURROGATE OUL	ANALYTE NC	IS OUL	CLCCV OUL
1,3,5-Trinitrobenzene	99-35-4		X				

Lab Sample ID: **21410220521**

Analysis Date: **10/31/2014 12:57:00 AM**

Analyte	CAS	CCV OUL	LCS/LCSD OUL	SURROGATE OUL	ANALYTE NC	IS OUL	CLCCV OUL
Acetone	67-64-1		X				

CCV OUL=CCV out of limits
LCS/LCSD OUL=LCS/LCSD out of limits
SURROGATE OUL=Surrogate out of limits
ANALYTE NC=The analyte did not confirm
IS OUL=Internal Standard out of limits
CLCCV OUL=Closing CCV out of limits

Sample Test Summary Report: 214102205

Lab Sample ID	Cust. Sample ID	Matrix	Proc. Desc.
21410220501	MA01MW002	W	SM 2540C TDS
21410220501	MA01MW002	W	SM 2320B Alkalinity Water
21410220501	MA01MW002	W	EPA 300.0 Inorganic Anions
21410220501	MA01MW002	W	EPA 6020A
21410220501	MA01MW002	W	EPA 6020A Dissolved
21410220501	MA01MW002	W	EPA 6020A Dissolved Prep
21410220501	MA01MW002	W	EPA 6020A Water Prep
21410220501	MA01MW002	W	EPA 7470A
21410220501	MA01MW002	W	EPA 7470A
21410220501	MA01MW002	W	EPA 7470A Dissolved Prep
21410220501	MA01MW002	W	EPA 7470A Dissolved
21410220501	MA01MW002	W	EPA 8260B
21410220501	MA01MW002	W	EPA 8330A Water
21410220501	MA01MW002	W	EPA 8330A Prep Water
21410220501	MA01MW002	W	EPA 9012B Cyanide Water
21410220501	MA01MW002	W	EPA 9012B Cyanide Prep Water
21410220501	MA01MW002	W	EPA 353.2 Nitrite
21410220501	MA01MW002	W	EPA 353.2 Nitrate
21410220501	MA01MW002	W	Ship work pending results
21410220502	MA01MW002-c	W	EPA 8260B
21410220503	MA01MW001	W	SM 2540C TDS
21410220503	MA01MW001	W	SM 2320B Alkalinity Water
21410220503	MA01MW001	W	EPA 300.0 Inorganic Anions
21410220503	MA01MW001	W	EPA 6020A
21410220503	MA01MW001	W	EPA 6020A Dissolved
21410220503	MA01MW001	W	EPA 6020A Dissolved Prep
21410220503	MA01MW001	W	EPA 6020A Water Prep
21410220503	MA01MW001	W	EPA 7470A
21410220503	MA01MW001	W	EPA 7470A
21410220503	MA01MW001	W	EPA 7470A Dissolved Prep
21410220503	MA01MW001	W	EPA 7470A Dissolved
21410220503	MA01MW001	W	EPA 8260B
21410220503	MA01MW001	W	EPA 8330A Water
21410220503	MA01MW001	W	EPA 8330A Prep Water
21410220503	MA01MW001	W	EPA 9012B Cyanide Water
21410220503	MA01MW001	W	EPA 9012B Cyanide Prep Water
21410220503	MA01MW001	W	EPA 353.2 Nitrite
21410220503	MA01MW001	W	EPA 353.2 Nitrate
21410220503	MA01MW001	W	Ship work pending results
21410220504	MA01MW004	W	SM 2540C TDS
21410220504	MA01MW004	W	SM 2320B Alkalinity Water
21410220504	MA01MW004	W	EPA 300.0 Inorganic Anions
21410220504	MA01MW004	W	EPA 6020A
21410220504	MA01MW004	W	EPA 6020A Dissolved
21410220504	MA01MW004	W	EPA 6020A Dissolved Prep
21410220504	MA01MW004	W	EPA 6020A Water Prep
21410220504	MA01MW004	W	EPA 7470A
21410220504	MA01MW004	W	EPA 7470A
21410220504	MA01MW004	W	EPA 7470A Dissolved Prep
21410220504	MA01MW004	W	EPA 7470A Dissolved
21410220504	MA01MW004	W	EPA 8260B
21410220504	MA01MW004	W	EPA 8330A Water
21410220504	MA01MW004	W	EPA 8330A Prep Water
21410220504	MA01MW004	W	EPA 9012B Cyanide Water
21410220504	MA01MW004	W	EPA 9012B Cyanide Prep Water

21410220504	MA01MW004	W	EPA 353.2 Nitrite
21410220504	MA01MW004	W	EPA 353.2 Nitrate
21410220504	MA01MW004	W	Ship work pending results
21410220505	MA01MW004-a	W	SM 2540C TDS
21410220505	MA01MW004-a	W	SM 2320B Alkalinity Water
21410220505	MA01MW004-a	W	EPA 300.0 Inorganic Anions
21410220505	MA01MW004-a	W	EPA 6020A
21410220505	MA01MW004-a	W	EPA 6020A Dissolved
21410220505	MA01MW004-a	W	EPA 6020A Dissolved Prep
21410220505	MA01MW004-a	W	EPA 6020A Water Prep
21410220505	MA01MW004-a	W	EPA 7470A
21410220505	MA01MW004-a	W	EPA 7470A
21410220505	MA01MW004-a	W	EPA 7470A Dissolved Prep
21410220505	MA01MW004-a	W	EPA 7470A Dissolved
21410220505	MA01MW004-a	W	EPA 8260B
21410220505	MA01MW004-a	W	EPA 8330A Water
21410220505	MA01MW004-a	W	EPA 8330A Prep Water
21410220505	MA01MW004-a	W	EPA 9012B Cyanide Water
21410220505	MA01MW004-a	W	EPA 9012B Cyanide Prep Water
21410220505	MA01MW004-a	W	EPA 353.2 Nitrite
21410220505	MA01MW004-a	W	EPA 353.2 Nitrate
21410220505	MA01MW004-a	W	Ship work pending results
21410220506	MA01MW004-c	W	EPA 8260B
21410220507	MA01MW003	W	SM 2540C TDS
21410220507	MA01MW003	W	SM 2320B Alkalinity Water
21410220507	MA01MW003	W	EPA 300.0 Inorganic Anions
21410220507	MA01MW003	W	EPA 6020A
21410220507	MA01MW003	W	EPA 6020A Dissolved
21410220507	MA01MW003	W	EPA 6020A Dissolved Prep
21410220507	MA01MW003	W	EPA 6020A Water Prep
21410220507	MA01MW003	W	EPA 7470A
21410220507	MA01MW003	W	EPA 7470A
21410220507	MA01MW003	W	EPA 7470A Dissolved Prep
21410220507	MA01MW003	W	EPA 7470A Dissolved
21410220507	MA01MW003	W	EPA 8260B
21410220507	MA01MW003	W	EPA 8330A Water
21410220507	MA01MW003	W	EPA 8330A Prep Water
21410220507	MA01MW003	W	EPA 9012B Cyanide Water
21410220507	MA01MW003	W	EPA 9012B Cyanide Prep Water
21410220507	MA01MW003	W	EPA 353.2 Nitrite
21410220507	MA01MW003	W	EPA 353.2 Nitrate
21410220507	MA01MW003	W	Ship work pending results
21410220508	MA01MW003-c	W	EPA 8260B
21410220509	M114MW002	W	SM 2540C TDS
21410220509	M114MW002	W	SM 2320B Alkalinity Water
21410220509	M114MW002	W	EPA 300.0 Inorganic Anions
21410220509	M114MW002	W	EPA 6020A
21410220509	M114MW002	W	EPA 6020A Dissolved
21410220509	M114MW002	W	EPA 6020A Dissolved Prep
21410220509	M114MW002	W	EPA 6020A Water Prep
21410220509	M114MW002	W	EPA 7470A
21410220509	M114MW002	W	EPA 7470A
21410220509	M114MW002	W	EPA 7470A Dissolved Prep
21410220509	M114MW002	W	EPA 7470A Dissolved
21410220509	M114MW002	W	EPA 8260B
21410220509	M114MW002	W	EPA 8330A Water
21410220509	M114MW002	W	EPA 8330A Prep Water
21410220509	M114MW002	W	EPA 9012B Cyanide Water
21410220509	M114MW002	W	EPA 9012B Cyanide Prep Water

21410220509	M114MW002	W	EPA 353.2 Nitrite
21410220509	M114MW002	W	EPA 353.2 Nitrate
21410220509	M114MW002	W	Ship work pending results
21410220510	M114MW002-c	W	EPA 8260B
21410220511	M114MW003	W	SM 2540C TDS
21410220511	M114MW003	W	SM 2320B Alkalinity Water
21410220511	M114MW003	W	EPA 300.0 Inorganic Anions
21410220511	M114MW003	W	EPA 6020A
21410220511	M114MW003	W	EPA 6020A Dissolved
21410220511	M114MW003	W	EPA 6020A Dissolved Prep
21410220511	M114MW003	W	EPA 6020A Water Prep
21410220511	M114MW003	W	EPA 7470A
21410220511	M114MW003	W	EPA 7470A
21410220511	M114MW003	W	EPA 7470A Dissolved Prep
21410220511	M114MW003	W	EPA 7470A Dissolved
21410220511	M114MW003	W	EPA 8260B
21410220511	M114MW003	W	EPA 8330A Water
21410220511	M114MW003	W	EPA 8330A Prep Water
21410220511	M114MW003	W	EPA 9012B Cyanide Water
21410220511	M114MW003	W	EPA 9012B Cyanide Prep Water
21410220511	M114MW003	W	EPA 353.2 Nitrite
21410220511	M114MW003	W	EPA 353.2 Nitrate
21410220511	M114MW003	W	Ship work pending results
21410220512	M114MW004	W	SM 2540C TDS
21410220512	M114MW004	W	SM 2320B Alkalinity Water
21410220512	M114MW004	W	EPA 300.0 Inorganic Anions
21410220512	M114MW004	W	EPA 6020A
21410220512	M114MW004	W	EPA 6020A Dissolved
21410220512	M114MW004	W	EPA 6020A Dissolved Prep
21410220512	M114MW004	W	EPA 6020A Water Prep
21410220512	M114MW004	W	EPA 7470A
21410220512	M114MW004	W	EPA 7470A
21410220512	M114MW004	W	EPA 7470A Dissolved Prep
21410220512	M114MW004	W	EPA 7470A Dissolved
21410220512	M114MW004	W	EPA 8260B
21410220512	M114MW004	W	EPA 8330A Water
21410220512	M114MW004	W	EPA 8330A Prep Water
21410220512	M114MW004	W	EPA 9012B Cyanide Water
21410220512	M114MW004	W	EPA 9012B Cyanide Prep Water
21410220512	M114MW004	W	EPA 353.2 Nitrite
21410220512	M114MW004	W	EPA 353.2 Nitrate
21410220512	M114MW004	W	Ship work pending results
21410220513	M114MW004-c	W	EPA 8260B
21410220514	M114MW001	W	SM 2540C TDS
21410220514	M114MW001	W	SM 2320B Alkalinity Water
21410220514	M114MW001	W	EPA 300.0 Inorganic Anions
21410220514	M114MW001	W	EPA 6020A
21410220514	M114MW001	W	EPA 6020A Dissolved
21410220514	M114MW001	W	EPA 6020A Dissolved Prep
21410220514	M114MW001	W	EPA 6020A Water Prep
21410220514	M114MW001	W	EPA 7470A
21410220514	M114MW001	W	EPA 7470A
21410220514	M114MW001	W	EPA 7470A Dissolved Prep
21410220514	M114MW001	W	EPA 7470A Dissolved
21410220514	M114MW001	W	EPA 8260B
21410220514	M114MW001	W	EPA 8330A Water
21410220514	M114MW001	W	EPA 8330A Prep Water
21410220514	M114MW001	W	EPA 9012B Cyanide Water
21410220514	M114MW001	W	EPA 9012B Cyanide Prep Water

21410220514	M114MW001	W	EPA 353.2 Nitrite
21410220514	M114MW001	W	EPA 353.2 Nitrate
21410220514	M114MW001	W	Ship work pending results
21410220515	MWQ-24	W	SM 2540C TDS
21410220515	MWQ-24	W	SM 2320B Alkalinity Water
21410220515	MWQ-24	W	EPA 300.0 Inorganic Anions
21410220515	MWQ-24	W	EPA 6020A
21410220515	MWQ-24	W	EPA 6020A Dissolved
21410220515	MWQ-24	W	EPA 6020A Dissolved Prep
21410220515	MWQ-24	W	EPA 6020A Water Prep
21410220515	MWQ-24	W	EPA 7470A
21410220515	MWQ-24	W	EPA 7470A
21410220515	MWQ-24	W	EPA 7470A Dissolved Prep
21410220515	MWQ-24	W	EPA 7470A Dissolved
21410220515	MWQ-24	W	EPA 8260B
21410220515	MWQ-24	W	EPA 8330A Water
21410220515	MWQ-24	W	EPA 8330A Prep Water
21410220515	MWQ-24	W	EPA 9012B Cyanide Water
21410220515	MWQ-24	W	EPA 9012B Cyanide Prep Water
21410220515	MWQ-24	W	EPA 353.2 Nitrite
21410220515	MWQ-24	W	EPA 353.2 Nitrate
21410220515	MWQ-24	W	Ship work pending results
21410220516	MWQ-24-ms	W	EPA 300.0 Inorganic Anions
21410220516	MWQ-24-ms	W	EPA 6020A
21410220516	MWQ-24-ms	W	EPA 6020A Dissolved
21410220516	MWQ-24-ms	W	EPA 6020A Dissolved Prep
21410220516	MWQ-24-ms	W	EPA 6020A Water Prep
21410220516	MWQ-24-ms	W	EPA 7470A
21410220516	MWQ-24-ms	W	EPA 7470A
21410220516	MWQ-24-ms	W	EPA 7470A Dissolved Prep
21410220516	MWQ-24-ms	W	EPA 7470A Dissolved
21410220516	MWQ-24-ms	W	EPA 8260B
21410220516	MWQ-24-ms	W	EPA 8330A Water
21410220516	MWQ-24-ms	W	EPA 8330A Prep Water
21410220516	MWQ-24-ms	W	EPA 9012B Cyanide Water
21410220516	MWQ-24-ms	W	EPA 9012B Cyanide Prep Water
21410220516	MWQ-24-ms	W	EPA 353.2 Nitrite
21410220516	MWQ-24-ms	W	EPA 353.2 Nitrate
21410220516	MWQ-24-ms	W	Ship work pending results
21410220517	MWQ-24-sd	W	EPA 300.0 Inorganic Anions
21410220517	MWQ-24-sd	W	EPA 6020A
21410220517	MWQ-24-sd	W	EPA 6020A Dissolved
21410220517	MWQ-24-sd	W	EPA 6020A Dissolved Prep
21410220517	MWQ-24-sd	W	EPA 6020A Water Prep
21410220517	MWQ-24-sd	W	EPA 7470A
21410220517	MWQ-24-sd	W	EPA 7470A
21410220517	MWQ-24-sd	W	EPA 7470A Dissolved Prep
21410220517	MWQ-24-sd	W	EPA 7470A Dissolved
21410220517	MWQ-24-sd	W	EPA 8260B
21410220517	MWQ-24-sd	W	EPA 8330A Water
21410220517	MWQ-24-sd	W	EPA 8330A Prep Water
21410220517	MWQ-24-sd	W	EPA 9012B Cyanide Water
21410220517	MWQ-24-sd	W	EPA 9012B Cyanide Prep Water
21410220517	MWQ-24-sd	W	EPA 353.2 Nitrite
21410220517	MWQ-24-sd	W	EPA 353.2 Nitrate
21410220517	MWQ-24-sd	W	Ship work pending results
21410220518	MWQ-24-a	W	SM 2540C TDS
21410220518	MWQ-24-a	W	SM 2320B Alkalinity Water
21410220519	MWQ-24-c	W	EPA 8260B

21410220520	MA02MW001D	W	SM 2540C TDS
21410220520	MA02MW001D	W	SM 2320B Alkalinity Water
21410220520	MA02MW001D	W	EPA 300.0 Inorganic Anions
21410220520	MA02MW001D	W	EPA 6020A
21410220520	MA02MW001D	W	EPA 6020A Dissolved
21410220520	MA02MW001D	W	EPA 6020A Dissolved Prep
21410220520	MA02MW001D	W	EPA 6020A Water Prep
21410220520	MA02MW001D	W	EPA 7470A
21410220520	MA02MW001D	W	EPA 7470A
21410220520	MA02MW001D	W	EPA 7470A Dissolved Prep
21410220520	MA02MW001D	W	EPA 7470A Dissolved
21410220520	MA02MW001D	W	EPA 8260B
21410220520	MA02MW001D	W	EPA 8330A Water
21410220520	MA02MW001D	W	EPA 8330A Prep Water
21410220520	MA02MW001D	W	EPA 9012B Cyanide Water
21410220520	MA02MW001D	W	EPA 9012B Cyanide Prep Water
21410220520	MA02MW001D	W	EPA 353.2 Nitrite
21410220520	MA02MW001D	W	EPA 353.2 Nitrate
21410220520	MA02MW001D	W	Ship work pending results
21410220521	MA02MW001D-c	W	EPA 8260B

Manual Integrations: 214102205

Lab Sample ID	Cust. Sample ID	Prod. Desc.	Compound	Comp. Name	
21410220515	MWQ-24	EPA 8330A	98-95-3	Nitrobenzene	
21410220517	MWQ-24-sd	EPA 8330A	118-96-7	2,4,6-Trinitrotoluene	
21410220517	MWQ-24-sd	EPA 8330A	121-14-2	2,4-Dinitrotoluene	
21410220517	MWQ-24-sd	EPA 8330A	121-82-4	RDX	
21410220517	MWQ-24-sd	EPA 8330A	19406-51-0	4-Amino-2,6-dinitrotoluene	
21410220517	MWQ-24-sd	EPA 8330A	35572-78-2	2-Amino-4,6-dinitrotoluene	
21410220517	MWQ-24-sd	EPA 8330A	479-45-8	Tetryl	
21410220517	MWQ-24-sd	EPA 8330A	528-29-0	1,2-Dinitrobenzene	
21410220517	MWQ-24-sd	EPA 8330A	55-63-0	Nitroglycerin	
21410220517	MWQ-24-sd	EPA 8330A	606-20-2	2,6-Dinitrotoluene	
21410220517	MWQ-24-sd	EPA 8330A	88-72-2	2-Nitrotoluene	
21410220517	MWQ-24-sd	EPA 8330A	98-95-3	Nitrobenzene	
21410220517	MWQ-24-sd	EPA 8330A	99-08-1	3-Nitrotoluene	
21410220517	MWQ-24-sd	EPA 8330A	99-35-4	1,3,5-Trinitrobenzene	
21410220517	MWQ-24-sd	EPA 8330A	99-65-0	1,3-Dinitrobenzene	
21410220517	MWQ-24-sd	EPA 8330A	99-99-0	4-Nitrotoluene	
21410220520	MA02MW001D	EPA 8330A	528-29-0	1,2-Dinitrobenzene	

Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

Common Abbreviations Utilized in this Report

ND	Indicates the result was Not Detected at the specified LOQ
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
MDL	Method Detection Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
00:00	Reported as a time equivalent to 12:00 AM

Reporting Flags Utilized in this Report

J	Indicates the result is between the MDL and LOQ
U	Indicates the compound was analyzed for but not detected
B	Indicates the analyte was detected in the associated Method Blank

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with NELAC, this report shall be reproduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with the NELAC standard and terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Estimated uncertainty of measurement is available upon request. This report is in compliance with the DOD QSM as specified in the contract if applicable.

Authorized Signature
GCAL Report 214102205

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21410220501	MA01MW002	Water	10/21/2014 10:40	10/22/2014 09:20
21410220502	MA01MW002-c	Water	10/21/2014 10:40	10/22/2014 09:20
21410220503	MA01MW001	Water	10/21/2014 12:20	10/22/2014 09:20
21410220504	MA01MW004	Water	10/21/2014 11:00	10/22/2014 09:20
21410220505	MA01MW004-a	Water	10/21/2014 11:00	10/22/2014 09:20
21410220506	MA01MW004-c	Water	10/21/2014 11:00	10/22/2014 09:20
21410220507	MA01MW003	Water	10/21/2014 12:26	10/22/2014 09:20
21410220508	MA01MW003-c	Water	10/21/2014 12:26	10/22/2014 09:20
21410220509	M114MW002	Water	10/22/2014 09:35	10/23/2014 09:40
21410220510	M114MW002-c	Water	10/22/2014 09:35	10/23/2014 09:40
21410220511	M114MW003	Water	10/22/2014 11:10	10/23/2014 09:40
21410220512	M114MW004	Water	10/22/2014 10:25	10/23/2014 09:40
21410220513	M114MW004-c	Water	10/22/2014 10:25	10/23/2014 09:40
21410220514	M114MW001	Water	10/22/2014 12:35	10/23/2014 09:40
21410220515	MWQ-24	Water	10/23/2014 09:32	10/24/2014 09:35
21410220516	MWQ-24-ms	Water	10/23/2014 09:32	10/24/2014 09:35
21410220517	MWQ-24-sd	Water	10/23/2014 09:32	10/24/2014 09:35
21410220518	MWQ-24-a	Water	10/23/2014 09:32	10/24/2014 09:35
21410220519	MWQ-24-c	Water	10/23/2014 09:32	10/24/2014 09:35
21410220520	MA02MW001D	Water	10/23/2014 11:43	10/24/2014 09:35
21410220521	MA02MW001D-c	Water	10/23/2014 11:43	10/24/2014 09:35

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MA01MW002

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV12

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220501

Lab File ID: 2141024/I7909

Date Collected: 10/21/14 Time: 1040

Date Received: 10/22/14

Date Analyzed: 10/24/14 Time: 1800

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 543720

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
630-20-6	1,1,1,2-Tetrachloroethane	0.120	U	0.120	1.00
71-55-6	1,1,1-Trichloroethane	0.123	U	0.123	1.00
79-34-5	1,1,2,2-Tetrachloroethane	0.109	U	0.109	1.00
79-00-5	1,1,2-Trichloroethane	0.159	U	0.159	1.00
75-34-3	1,1-Dichloroethane	0.171	U	0.171	1.00
75-35-4	1,1-Dichloroethene	0.200	U	0.200	1.00
563-58-6	1,1-Dichloropropene	0.052	U	0.052	1.00
87-61-6	1,2,3-Trichlorobenzene	0.079	U	0.079	1.00
96-18-4	1,2,3-Trichloropropane	0.065	U	0.065	1.00
120-82-1	1,2,4-Trichlorobenzene	0.105	U	0.105	1.00
95-63-6	1,2,4-Trimethylbenzene	0.084	U	0.084	1.00
96-12-8	1,2-Dibromo-3-chloropropane	0.194	U	0.194	1.00
106-93-4	1,2-Dibromoethane	0.102	U	0.102	1.00
95-50-1	1,2-Dichlorobenzene	0.135	U	0.135	1.00
107-06-2	1,2-Dichloroethane	0.116	U	0.116	1.00
78-87-5	1,2-Dichloropropane	0.150	U	0.150	1.00
108-67-8	1,3,5-Trimethylbenzene	0.066	U	0.066	1.00
541-73-1	1,3-Dichlorobenzene	0.138	U	0.138	1.00
142-28-9	1,3-Dichloropropane	0.059	U	0.059	1.00
106-46-7	1,4-Dichlorobenzene	0.083	U	0.083	1.00
594-20-7	2,2-Dichloropropane	0.170	U	0.170	1.00
78-93-3	2-Butanone	0.142	U	0.142	5.00
95-49-8	2-Chlorotoluene	0.080	U	0.080	1.00
591-78-6	2-Hexanone	0.122	U	0.122	5.00
106-43-4	4-Chlorotoluene	0.124	U	0.124	1.00
99-87-6	4-Isopropyltoluene	0.070	U	0.070	1.00
108-10-1	4-Methyl-2-pentanone	0.120	U	0.120	5.00
67-64-1	Acetone	0.193	U	0.193	5.00
71-43-2	Benzene	0.111	U	0.111	1.00
108-86-1	Bromobenzene	0.145	U	0.145	1.00
74-97-5	Bromochloromethane	0.127	U	0.127	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MA01MW002

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV12

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220501

Lab File ID: 2141024/I7909

Date Collected: 10/21/14 Time: 1040

Date Received: 10/22/14

Date Analyzed: 10/24/14 Time: 1800

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 543720

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
75-27-4	Bromodichloromethane	0.083	U	0.083	1.00
75-25-2	Bromoform	0.215	U	0.215	1.00
74-83-9	Bromomethane	0.427	U	0.427	1.00
75-15-0	Carbon disulfide	0.190	U	0.190	1.00
56-23-5	Carbon tetrachloride	0.248	U	0.248	1.00
108-90-7	Chlorobenzene	0.083	U	0.083	1.00
75-00-3	Chloroethane	0.235	U	0.235	1.00
67-66-3	Chloroform	0.155	U	0.155	1.00
74-87-3	Chloromethane	0.144	U	0.144	1.00
74-95-3	Dibromomethane	0.211	U	0.211	1.00
75-71-8	Dichlorodifluoromethane	0.145	U	0.145	1.00
100-41-4	Ethylbenzene	0.109	U	0.109	1.00
87-68-3	Hexachlorobutadiene	0.265	U	0.265	1.00
98-82-8	Isopropylbenzene (Cumene)	0.130	U	0.130	1.00
75-09-2	Methylene chloride	0.149	U	0.149	5.00
91-20-3	Naphthalene	0.176	U	0.176	1.00
100-42-5	Styrene	0.089	U	0.089	1.00
127-18-4	Tetrachloroethene	0.193	U	0.193	1.00
108-88-3	Toluene	0.122	U	0.122	1.00
79-01-6	Trichloroethene	0.161	U	0.161	1.00
75-69-4	Trichlorofluoromethane	0.157	U	0.157	1.00
75-01-4	Vinyl chloride	0.127	U	0.127	1.00
156-59-2	cis-1,2-Dichloroethene	0.103	U	0.103	1.00
10061-01-5	cis-1,3-Dichloropropene	0.124	U	0.124	1.00
136777-61-	m,p-Xylene	0.123	U	0.123	2.00
104-51-8	n-Butylbenzene	0.123	U	0.123	1.00
103-65-1	n-Propylbenzene	0.727	U	0.727	1.00
95-47-6	o-Xylene	0.055	U	0.055	1.00
135-98-8	sec-Butylbenzene	0.107	U	0.107	1.00
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078	U	0.078	5.00
98-06-6	tert-Butylbenzene	0.087	U	0.087	1.00
156-60-5	trans-1,2-Dichloroethene	0.077	U	0.077	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MA01MW002

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV12

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220501

Lab File ID: 2141024/I7909

Date Collected: 10/21/14 Time: 1040

Date Received: 10/22/14

Date Analyzed: 10/24/14 Time: 1800

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 543720

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
10061-02-6	trans-1,3-Dichloropropene	0.128	U	0.128	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MA01MW002-c

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV12

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220502

Lab File ID: 2141024/I7910

Date Collected: 10/21/14 Time: 1040

Date Received: 10/22/14

Date Analyzed: 10/24/14 Time: 1823

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 543720

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
630-20-6	1,1,1,2-Tetrachloroethane	0.120	U	0.120	1.00
71-55-6	1,1,1-Trichloroethane	0.123	U	0.123	1.00
79-34-5	1,1,2,2-Tetrachloroethane	0.109	U	0.109	1.00
79-00-5	1,1,2-Trichloroethane	0.159	U	0.159	1.00
75-34-3	1,1-Dichloroethane	0.171	U	0.171	1.00
75-35-4	1,1-Dichloroethene	0.200	U	0.200	1.00
563-58-6	1,1-Dichloropropene	0.052	U	0.052	1.00
87-61-6	1,2,3-Trichlorobenzene	0.079	U	0.079	1.00
96-18-4	1,2,3-Trichloropropane	0.065	U	0.065	1.00
120-82-1	1,2,4-Trichlorobenzene	0.105	U	0.105	1.00
95-63-6	1,2,4-Trimethylbenzene	0.084	U	0.084	1.00
96-12-8	1,2-Dibromo-3-chloropropane	0.194	U	0.194	1.00
106-93-4	1,2-Dibromoethane	0.102	U	0.102	1.00
95-50-1	1,2-Dichlorobenzene	0.135	U	0.135	1.00
107-06-2	1,2-Dichloroethane	0.116	U	0.116	1.00
78-87-5	1,2-Dichloropropane	0.150	U	0.150	1.00
108-67-8	1,3,5-Trimethylbenzene	0.066	U	0.066	1.00
541-73-1	1,3-Dichlorobenzene	0.138	U	0.138	1.00
142-28-9	1,3-Dichloropropane	0.059	U	0.059	1.00
106-46-7	1,4-Dichlorobenzene	0.083	U	0.083	1.00
594-20-7	2,2-Dichloropropane	0.170	U	0.170	1.00
78-93-3	2-Butanone	0.142	U	0.142	5.00
95-49-8	2-Chlorotoluene	0.080	U	0.080	1.00
591-78-6	2-Hexanone	0.122	U	0.122	5.00
106-43-4	4-Chlorotoluene	0.124	U	0.124	1.00
99-87-6	4-Isopropyltoluene	0.070	U	0.070	1.00
108-10-1	4-Methyl-2-pentanone	0.120	U	0.120	5.00
67-64-1	Acetone	0.193	U	0.193	5.00
71-43-2	Benzene	0.111	U	0.111	1.00
108-86-1	Bromobenzene	0.145	U	0.145	1.00
74-97-5	Bromochloromethane	0.127	U	0.127	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MA01MW002-c

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV12

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220502

Lab File ID: 2141024/I7910

Date Collected: 10/21/14 Time: 1040

Date Received: 10/22/14

Date Analyzed: 10/24/14 Time: 1823

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 543720

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
75-27-4	Bromodichloromethane	0.083	U	0.083	1.00
75-25-2	Bromoform	0.215	U	0.215	1.00
74-83-9	Bromomethane	0.427	U	0.427	1.00
75-15-0	Carbon disulfide	0.190	U	0.190	1.00
56-23-5	Carbon tetrachloride	0.248	U	0.248	1.00
108-90-7	Chlorobenzene	0.083	U	0.083	1.00
75-00-3	Chloroethane	0.235	U	0.235	1.00
67-66-3	Chloroform	0.155	U	0.155	1.00
74-87-3	Chloromethane	0.144	U	0.144	1.00
74-95-3	Dibromomethane	0.211	U	0.211	1.00
75-71-8	Dichlorodifluoromethane	0.145	U	0.145	1.00
100-41-4	Ethylbenzene	0.109	U	0.109	1.00
87-68-3	Hexachlorobutadiene	0.265	U	0.265	1.00
98-82-8	Isopropylbenzene (Cumene)	0.130	U	0.130	1.00
75-09-2	Methylene chloride	0.149	U	0.149	5.00
91-20-3	Naphthalene	0.176	U	0.176	1.00
100-42-5	Styrene	0.089	U	0.089	1.00
127-18-4	Tetrachloroethene	0.193	U	0.193	1.00
108-88-3	Toluene	0.122	U	0.122	1.00
79-01-6	Trichloroethene	0.161	U	0.161	1.00
75-69-4	Trichlorofluoromethane	0.157	U	0.157	1.00
75-01-4	Vinyl chloride	0.127	U	0.127	1.00
156-59-2	cis-1,2-Dichloroethene	0.103	U	0.103	1.00
10061-01-5	cis-1,3-Dichloropropene	0.124	U	0.124	1.00
136777-61-	m,p-Xylene	0.123	U	0.123	2.00
104-51-8	n-Butylbenzene	0.123	U	0.123	1.00
103-65-1	n-Propylbenzene	0.727	U	0.727	1.00
95-47-6	o-Xylene	0.055	U	0.055	1.00
135-98-8	sec-Butylbenzene	0.107	U	0.107	1.00
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078	U	0.078	5.00
98-06-6	tert-Butylbenzene	0.087	U	0.087	1.00
156-60-5	trans-1,2-Dichloroethene	0.077	U	0.077	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MA01MW002-c

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Lab Sample ID: 21410220502

Level: (low/med)

Lab File ID: 2141024/I7910

% Moisture: not dec.

Date Collected: 10/21/14 Time: 1040

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received: 10/22/14

Instrument ID: MSV12

Date Analyzed: 10/24/14 Time: 1823

Soil Extract Volume: (µL)

Dilution Factor: 1 Analyst: CLH

Soil Aliquot Volume: (µL)

Prep Batch: Analytical Batch: 543720

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
10061-02-6	trans-1,3-Dichloropropene	0.128	U	0.128	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MA01MW001

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV12

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220503

Lab File ID: 2141024/I7911

Date Collected: 10/21/14 Time: 1220

Date Received: 10/22/14

Date Analyzed: 10/24/14 Time: 1846

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 543720

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
630-20-6	1,1,1,2-Tetrachloroethane	0.120	U	0.120	1.00
71-55-6	1,1,1-Trichloroethane	0.123	U	0.123	1.00
79-34-5	1,1,2,2-Tetrachloroethane	0.109	U	0.109	1.00
79-00-5	1,1,2-Trichloroethane	0.159	U	0.159	1.00
75-34-3	1,1-Dichloroethane	0.171	U	0.171	1.00
75-35-4	1,1-Dichloroethene	0.200	U	0.200	1.00
563-58-6	1,1-Dichloropropene	0.052	U	0.052	1.00
87-61-6	1,2,3-Trichlorobenzene	0.079	U	0.079	1.00
96-18-4	1,2,3-Trichloropropane	0.065	U	0.065	1.00
120-82-1	1,2,4-Trichlorobenzene	0.105	U	0.105	1.00
95-63-6	1,2,4-Trimethylbenzene	0.084	U	0.084	1.00
96-12-8	1,2-Dibromo-3-chloropropane	0.194	U	0.194	1.00
106-93-4	1,2-Dibromoethane	0.102	U	0.102	1.00
95-50-1	1,2-Dichlorobenzene	0.135	U	0.135	1.00
107-06-2	1,2-Dichloroethane	0.116	U	0.116	1.00
78-87-5	1,2-Dichloropropane	0.150	U	0.150	1.00
108-67-8	1,3,5-Trimethylbenzene	0.066	U	0.066	1.00
541-73-1	1,3-Dichlorobenzene	0.138	U	0.138	1.00
142-28-9	1,3-Dichloropropane	0.059	U	0.059	1.00
106-46-7	1,4-Dichlorobenzene	0.083	U	0.083	1.00
594-20-7	2,2-Dichloropropane	0.170	U	0.170	1.00
78-93-3	2-Butanone	0.142	U	0.142	5.00
95-49-8	2-Chlorotoluene	0.080	U	0.080	1.00
591-78-6	2-Hexanone	0.122	U	0.122	5.00
106-43-4	4-Chlorotoluene	0.124	U	0.124	1.00
99-87-6	4-Isopropyltoluene	0.070	U	0.070	1.00
108-10-1	4-Methyl-2-pentanone	0.120	U	0.120	5.00
67-64-1	Acetone	0.193	U	0.193	5.00
71-43-2	Benzene	0.111	U	0.111	1.00
108-86-1	Bromobenzene	0.145	U	0.145	1.00
74-97-5	Bromochloromethane	0.127	U	0.127	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MA01MW001

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV12

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220503

Lab File ID: 2141024/I7911

Date Collected: 10/21/14 Time: 1220

Date Received: 10/22/14

Date Analyzed: 10/24/14 Time: 1846

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 543720

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
75-27-4	Bromodichloromethane	0.083	U	0.083	1.00
75-25-2	Bromoform	0.215	U	0.215	1.00
74-83-9	Bromomethane	0.427	U	0.427	1.00
75-15-0	Carbon disulfide	0.190	U	0.190	1.00
56-23-5	Carbon tetrachloride	0.248	U	0.248	1.00
108-90-7	Chlorobenzene	0.083	U	0.083	1.00
75-00-3	Chloroethane	0.235	U	0.235	1.00
67-66-3	Chloroform	0.155	U	0.155	1.00
74-87-3	Chloromethane	0.144	U	0.144	1.00
74-95-3	Dibromomethane	0.211	U	0.211	1.00
75-71-8	Dichlorodifluoromethane	0.145	U	0.145	1.00
100-41-4	Ethylbenzene	0.109	U	0.109	1.00
87-68-3	Hexachlorobutadiene	0.265	U	0.265	1.00
98-82-8	Isopropylbenzene (Cumene)	0.130	U	0.130	1.00
75-09-2	Methylene chloride	0.149	U	0.149	5.00
91-20-3	Naphthalene	0.176	U	0.176	1.00
100-42-5	Styrene	0.089	U	0.089	1.00
127-18-4	Tetrachloroethene	0.193	U	0.193	1.00
108-88-3	Toluene	0.122	U	0.122	1.00
79-01-6	Trichloroethene	0.161	U	0.161	1.00
75-69-4	Trichlorofluoromethane	0.157	U	0.157	1.00
75-01-4	Vinyl chloride	0.127	U	0.127	1.00
156-59-2	cis-1,2-Dichloroethene	0.103	U	0.103	1.00
10061-01-5	cis-1,3-Dichloropropene	0.124	U	0.124	1.00
136777-61-	m,p-Xylene	0.123	U	0.123	2.00
104-51-8	n-Butylbenzene	0.123	U	0.123	1.00
103-65-1	n-Propylbenzene	0.727	U	0.727	1.00
95-47-6	o-Xylene	0.055	U	0.055	1.00
135-98-8	sec-Butylbenzene	0.107	U	0.107	1.00
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078	U	0.078	5.00
98-06-6	tert-Butylbenzene	0.087	U	0.087	1.00
156-60-5	trans-1,2-Dichloroethene	0.077	U	0.077	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MA01MW001

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV12

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220503

Lab File ID: 2141024/I7911

Date Collected: 10/21/14 Time: 1220

Date Received: 10/22/14

Date Analyzed: 10/24/14 Time: 1846

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 543720

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
10061-02-6	trans-1,3-Dichloropropene	0.128	U	0.128	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MA01MW004

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV12

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220504

Lab File ID: 2141024/I7912

Date Collected: 10/21/14 Time: 1100

Date Received: 10/22/14

Date Analyzed: 10/24/14 Time: 1909

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 543720

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
630-20-6	1,1,1,2-Tetrachloroethane	0.120	U	0.120	1.00
71-55-6	1,1,1-Trichloroethane	0.123	U	0.123	1.00
79-34-5	1,1,2,2-Tetrachloroethane	0.109	U	0.109	1.00
79-00-5	1,1,2-Trichloroethane	0.159	U	0.159	1.00
75-34-3	1,1-Dichloroethane	0.171	U	0.171	1.00
75-35-4	1,1-Dichloroethene	0.200	U	0.200	1.00
563-58-6	1,1-Dichloropropene	0.052	U	0.052	1.00
87-61-6	1,2,3-Trichlorobenzene	0.079	U	0.079	1.00
96-18-4	1,2,3-Trichloropropane	0.065	U	0.065	1.00
120-82-1	1,2,4-Trichlorobenzene	0.105	U	0.105	1.00
95-63-6	1,2,4-Trimethylbenzene	0.084	U	0.084	1.00
96-12-8	1,2-Dibromo-3-chloropropane	0.194	U	0.194	1.00
106-93-4	1,2-Dibromoethane	0.102	U	0.102	1.00
95-50-1	1,2-Dichlorobenzene	0.135	U	0.135	1.00
107-06-2	1,2-Dichloroethane	0.116	U	0.116	1.00
78-87-5	1,2-Dichloropropane	0.150	U	0.150	1.00
108-67-8	1,3,5-Trimethylbenzene	0.066	U	0.066	1.00
541-73-1	1,3-Dichlorobenzene	0.138	U	0.138	1.00
142-28-9	1,3-Dichloropropane	0.059	U	0.059	1.00
106-46-7	1,4-Dichlorobenzene	0.083	U	0.083	1.00
594-20-7	2,2-Dichloropropane	0.170	U	0.170	1.00
78-93-3	2-Butanone	0.142	U	0.142	5.00
95-49-8	2-Chlorotoluene	0.080	U	0.080	1.00
591-78-6	2-Hexanone	0.122	U	0.122	5.00
106-43-4	4-Chlorotoluene	0.124	U	0.124	1.00
99-87-6	4-Isopropyltoluene	0.070	U	0.070	1.00
108-10-1	4-Methyl-2-pentanone	0.120	U	0.120	5.00
67-64-1	Acetone	0.193	U	0.193	5.00
71-43-2	Benzene	0.111	U	0.111	1.00
108-86-1	Bromobenzene	0.145	U	0.145	1.00
74-97-5	Bromochloromethane	0.127	U	0.127	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MA01MW004

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV12

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220504

Lab File ID: 2141024/I7912

Date Collected: 10/21/14 Time: 1100

Date Received: 10/22/14

Date Analyzed: 10/24/14 Time: 1909

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 543720

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
75-27-4	Bromodichloromethane	0.083	U	0.083	1.00
75-25-2	Bromoform	0.215	U	0.215	1.00
74-83-9	Bromomethane	0.427	U	0.427	1.00
75-15-0	Carbon disulfide	0.190	U	0.190	1.00
56-23-5	Carbon tetrachloride	0.248	U	0.248	1.00
108-90-7	Chlorobenzene	0.083	U	0.083	1.00
75-00-3	Chloroethane	0.235	U	0.235	1.00
67-66-3	Chloroform	0.155	U	0.155	1.00
74-87-3	Chloromethane	0.144	U	0.144	1.00
74-95-3	Dibromomethane	0.211	U	0.211	1.00
75-71-8	Dichlorodifluoromethane	0.145	U	0.145	1.00
100-41-4	Ethylbenzene	0.109	U	0.109	1.00
87-68-3	Hexachlorobutadiene	0.265	U	0.265	1.00
98-82-8	Isopropylbenzene (Cumene)	0.130	U	0.130	1.00
75-09-2	Methylene chloride	0.149	U	0.149	5.00
91-20-3	Naphthalene	0.176	U	0.176	1.00
100-42-5	Styrene	0.089	U	0.089	1.00
127-18-4	Tetrachloroethene	0.193	U	0.193	1.00
108-88-3	Toluene	0.122	U	0.122	1.00
79-01-6	Trichloroethene	0.161	U	0.161	1.00
75-69-4	Trichlorofluoromethane	0.157	U	0.157	1.00
75-01-4	Vinyl chloride	0.127	U	0.127	1.00
156-59-2	cis-1,2-Dichloroethene	0.103	U	0.103	1.00
10061-01-5	cis-1,3-Dichloropropene	0.124	U	0.124	1.00
136777-61-	m,p-Xylene	0.123	U	0.123	2.00
104-51-8	n-Butylbenzene	0.123	U	0.123	1.00
103-65-1	n-Propylbenzene	0.727	U	0.727	1.00
95-47-6	o-Xylene	0.055	U	0.055	1.00
135-98-8	sec-Butylbenzene	0.107	U	0.107	1.00
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078	U	0.078	5.00
98-06-6	tert-Butylbenzene	0.087	U	0.087	1.00
156-60-5	trans-1,2-Dichloroethene	0.077	U	0.077	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MA01MW004

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV12

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220504

Lab File ID: 2141024/I7912

Date Collected: 10/21/14 Time: 1100

Date Received: 10/22/14

Date Analyzed: 10/24/14 Time: 1909

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 543720

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
10061-02-6	trans-1,3-Dichloropropene	0.128	U	0.128	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MA01MW004-a

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV12

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220505

Lab File ID: 2141024/I7913

Date Collected: 10/21/14 Time: 1100

Date Received: 10/22/14

Date Analyzed: 10/24/14 Time: 1932

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 543720

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
630-20-6	1,1,1,2-Tetrachloroethane	0.120	U	0.120	1.00
71-55-6	1,1,1-Trichloroethane	0.123	U	0.123	1.00
79-34-5	1,1,2,2-Tetrachloroethane	0.109	U	0.109	1.00
79-00-5	1,1,2-Trichloroethane	0.159	U	0.159	1.00
75-34-3	1,1-Dichloroethane	0.171	U	0.171	1.00
75-35-4	1,1-Dichloroethene	0.200	U	0.200	1.00
563-58-6	1,1-Dichloropropene	0.052	U	0.052	1.00
87-61-6	1,2,3-Trichlorobenzene	0.079	U	0.079	1.00
96-18-4	1,2,3-Trichloropropane	0.065	U	0.065	1.00
120-82-1	1,2,4-Trichlorobenzene	0.105	U	0.105	1.00
95-63-6	1,2,4-Trimethylbenzene	0.084	U	0.084	1.00
96-12-8	1,2-Dibromo-3-chloropropane	0.194	U	0.194	1.00
106-93-4	1,2-Dibromoethane	0.102	U	0.102	1.00
95-50-1	1,2-Dichlorobenzene	0.135	U	0.135	1.00
107-06-2	1,2-Dichloroethane	0.116	U	0.116	1.00
78-87-5	1,2-Dichloropropane	0.150	U	0.150	1.00
108-67-8	1,3,5-Trimethylbenzene	0.066	U	0.066	1.00
541-73-1	1,3-Dichlorobenzene	0.138	U	0.138	1.00
142-28-9	1,3-Dichloropropane	0.059	U	0.059	1.00
106-46-7	1,4-Dichlorobenzene	0.083	U	0.083	1.00
594-20-7	2,2-Dichloropropane	0.170	U	0.170	1.00
78-93-3	2-Butanone	0.142	U	0.142	5.00
95-49-8	2-Chlorotoluene	0.080	U	0.080	1.00
591-78-6	2-Hexanone	0.122	U	0.122	5.00
106-43-4	4-Chlorotoluene	0.124	U	0.124	1.00
99-87-6	4-Isopropyltoluene	0.070	U	0.070	1.00
108-10-1	4-Methyl-2-pentanone	0.120	U	0.120	5.00
67-64-1	Acetone	0.193	U	0.193	5.00
71-43-2	Benzene	0.111	U	0.111	1.00
108-86-1	Bromobenzene	0.145	U	0.145	1.00
74-97-5	Bromochloromethane	0.127	U	0.127	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MA01MW004-a

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV12

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220505

Lab File ID: 2141024/I7913

Date Collected: 10/21/14 Time: 1100

Date Received: 10/22/14

Date Analyzed: 10/24/14 Time: 1932

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 543720

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
75-27-4	Bromodichloromethane	0.083	U	0.083	1.00
75-25-2	Bromoform	0.215	U	0.215	1.00
74-83-9	Bromomethane	0.427	U	0.427	1.00
75-15-0	Carbon disulfide	0.190	U	0.190	1.00
56-23-5	Carbon tetrachloride	0.248	U	0.248	1.00
108-90-7	Chlorobenzene	0.083	U	0.083	1.00
75-00-3	Chloroethane	0.235	U	0.235	1.00
67-66-3	Chloroform	0.155	U	0.155	1.00
74-87-3	Chloromethane	0.144	U	0.144	1.00
74-95-3	Dibromomethane	0.211	U	0.211	1.00
75-71-8	Dichlorodifluoromethane	0.145	U	0.145	1.00
100-41-4	Ethylbenzene	0.109	U	0.109	1.00
87-68-3	Hexachlorobutadiene	0.265	U	0.265	1.00
98-82-8	Isopropylbenzene (Cumene)	0.130	U	0.130	1.00
75-09-2	Methylene chloride	0.149	U	0.149	5.00
91-20-3	Naphthalene	0.176	U	0.176	1.00
100-42-5	Styrene	0.089	U	0.089	1.00
127-18-4	Tetrachloroethene	0.193	U	0.193	1.00
108-88-3	Toluene	0.122	U	0.122	1.00
79-01-6	Trichloroethene	0.161	U	0.161	1.00
75-69-4	Trichlorofluoromethane	0.157	U	0.157	1.00
75-01-4	Vinyl chloride	0.127	U	0.127	1.00
156-59-2	cis-1,2-Dichloroethene	0.103	U	0.103	1.00
10061-01-5	cis-1,3-Dichloropropene	0.124	U	0.124	1.00
136777-61-	m,p-Xylene	0.123	U	0.123	2.00
104-51-8	n-Butylbenzene	0.123	U	0.123	1.00
103-65-1	n-Propylbenzene	0.727	U	0.727	1.00
95-47-6	o-Xylene	0.055	U	0.055	1.00
135-98-8	sec-Butylbenzene	0.107	U	0.107	1.00
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078	U	0.078	5.00
98-06-6	tert-Butylbenzene	0.087	U	0.087	1.00
156-60-5	trans-1,2-Dichloroethene	0.077	U	0.077	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MA01MW004-a

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV12

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220505

Lab File ID: 2141024/I7913

Date Collected: 10/21/14 Time: 1100

Date Received: 10/22/14

Date Analyzed: 10/24/14 Time: 1932

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 543720

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
10061-02-6	trans-1,3-Dichloropropene	0.128	U	0.128	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MA01MW004-c

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV12

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220506

Lab File ID: 2141024/I7914

Date Collected: 10/21/14 Time: 1100

Date Received: 10/22/14

Date Analyzed: 10/24/14 Time: 1954

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 543720

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
630-20-6	1,1,1,2-Tetrachloroethane	0.120	U	0.120	1.00
71-55-6	1,1,1-Trichloroethane	0.123	U	0.123	1.00
79-34-5	1,1,2,2-Tetrachloroethane	0.109	U	0.109	1.00
79-00-5	1,1,2-Trichloroethane	0.159	U	0.159	1.00
75-34-3	1,1-Dichloroethane	0.171	U	0.171	1.00
75-35-4	1,1-Dichloroethene	0.200	U	0.200	1.00
563-58-6	1,1-Dichloropropene	0.052	U	0.052	1.00
87-61-6	1,2,3-Trichlorobenzene	0.079	U	0.079	1.00
96-18-4	1,2,3-Trichloropropane	0.065	U	0.065	1.00
120-82-1	1,2,4-Trichlorobenzene	0.105	U	0.105	1.00
95-63-6	1,2,4-Trimethylbenzene	0.084	U	0.084	1.00
96-12-8	1,2-Dibromo-3-chloropropane	0.194	U	0.194	1.00
106-93-4	1,2-Dibromoethane	0.102	U	0.102	1.00
95-50-1	1,2-Dichlorobenzene	0.135	U	0.135	1.00
107-06-2	1,2-Dichloroethane	0.116	U	0.116	1.00
78-87-5	1,2-Dichloropropane	0.150	U	0.150	1.00
108-67-8	1,3,5-Trimethylbenzene	0.066	U	0.066	1.00
541-73-1	1,3-Dichlorobenzene	0.138	U	0.138	1.00
142-28-9	1,3-Dichloropropane	0.059	U	0.059	1.00
106-46-7	1,4-Dichlorobenzene	0.083	U	0.083	1.00
594-20-7	2,2-Dichloropropane	0.170	U	0.170	1.00
78-93-3	2-Butanone	0.142	U	0.142	5.00
95-49-8	2-Chlorotoluene	0.080	U	0.080	1.00
591-78-6	2-Hexanone	0.122	U	0.122	5.00
106-43-4	4-Chlorotoluene	0.124	U	0.124	1.00
99-87-6	4-Isopropyltoluene	0.070	U	0.070	1.00
108-10-1	4-Methyl-2-pentanone	0.120	U	0.120	5.00
67-64-1	Acetone	0.193	U	0.193	5.00
71-43-2	Benzene	0.111	U	0.111	1.00
108-86-1	Bromobenzene	0.145	U	0.145	1.00
74-97-5	Bromochloromethane	0.127	U	0.127	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MA01MW004-c

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV12

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220506

Lab File ID: 2141024/I7914

Date Collected: 10/21/14 Time: 1100

Date Received: 10/22/14

Date Analyzed: 10/24/14 Time: 1954

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 543720

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
75-27-4	Bromodichloromethane	0.083	U	0.083	1.00
75-25-2	Bromoform	0.215	U	0.215	1.00
74-83-9	Bromomethane	0.427	U	0.427	1.00
75-15-0	Carbon disulfide	0.190	U	0.190	1.00
56-23-5	Carbon tetrachloride	0.248	U	0.248	1.00
108-90-7	Chlorobenzene	0.083	U	0.083	1.00
75-00-3	Chloroethane	0.235	U	0.235	1.00
67-66-3	Chloroform	0.155	U	0.155	1.00
74-87-3	Chloromethane	0.144	U	0.144	1.00
74-95-3	Dibromomethane	0.211	U	0.211	1.00
75-71-8	Dichlorodifluoromethane	0.145	U	0.145	1.00
100-41-4	Ethylbenzene	0.109	U	0.109	1.00
87-68-3	Hexachlorobutadiene	0.265	U	0.265	1.00
98-82-8	Isopropylbenzene (Cumene)	0.130	U	0.130	1.00
75-09-2	Methylene chloride	0.149	U	0.149	5.00
91-20-3	Naphthalene	0.176	U	0.176	1.00
100-42-5	Styrene	0.089	U	0.089	1.00
127-18-4	Tetrachloroethene	0.193	U	0.193	1.00
108-88-3	Toluene	0.122	U	0.122	1.00
79-01-6	Trichloroethene	0.161	U	0.161	1.00
75-69-4	Trichlorofluoromethane	0.157	U	0.157	1.00
75-01-4	Vinyl chloride	0.127	U	0.127	1.00
156-59-2	cis-1,2-Dichloroethene	0.103	U	0.103	1.00
10061-01-5	cis-1,3-Dichloropropene	0.124	U	0.124	1.00
136777-61-	m,p-Xylene	0.123	U	0.123	2.00
104-51-8	n-Butylbenzene	0.123	U	0.123	1.00
103-65-1	n-Propylbenzene	0.727	U	0.727	1.00
95-47-6	o-Xylene	0.055	U	0.055	1.00
135-98-8	sec-Butylbenzene	0.107	U	0.107	1.00
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078	U	0.078	5.00
98-06-6	tert-Butylbenzene	0.087	U	0.087	1.00
156-60-5	trans-1,2-Dichloroethene	0.077	U	0.077	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MA01MW004-c

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV12

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220506

Lab File ID: 2141024/I7914

Date Collected: 10/21/14 Time: 1100

Date Received: 10/22/14

Date Analyzed: 10/24/14 Time: 1954

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 543720

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
10061-02-6	trans-1,3-Dichloropropene	0.128	U	0.128	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MA01MW003

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV12

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220507

Lab File ID: 2141024/I7915

Date Collected: 10/21/14 Time: 1226

Date Received: 10/22/14

Date Analyzed: 10/24/14 Time: 2017

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 543720

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
630-20-6	1,1,1,2-Tetrachloroethane	0.120	U	0.120	1.00
71-55-6	1,1,1-Trichloroethane	0.123	U	0.123	1.00
79-34-5	1,1,2,2-Tetrachloroethane	0.109	U	0.109	1.00
79-00-5	1,1,2-Trichloroethane	0.159	U	0.159	1.00
75-34-3	1,1-Dichloroethane	0.171	U	0.171	1.00
75-35-4	1,1-Dichloroethene	0.200	U	0.200	1.00
563-58-6	1,1-Dichloropropene	0.052	U	0.052	1.00
87-61-6	1,2,3-Trichlorobenzene	0.079	U	0.079	1.00
96-18-4	1,2,3-Trichloropropane	0.065	U	0.065	1.00
120-82-1	1,2,4-Trichlorobenzene	0.105	U	0.105	1.00
95-63-6	1,2,4-Trimethylbenzene	0.084	U	0.084	1.00
96-12-8	1,2-Dibromo-3-chloropropane	0.194	U	0.194	1.00
106-93-4	1,2-Dibromoethane	0.102	U	0.102	1.00
95-50-1	1,2-Dichlorobenzene	0.135	U	0.135	1.00
107-06-2	1,2-Dichloroethane	0.116	U	0.116	1.00
78-87-5	1,2-Dichloropropane	0.150	U	0.150	1.00
108-67-8	1,3,5-Trimethylbenzene	0.066	U	0.066	1.00
541-73-1	1,3-Dichlorobenzene	0.138	U	0.138	1.00
142-28-9	1,3-Dichloropropane	0.059	U	0.059	1.00
106-46-7	1,4-Dichlorobenzene	0.083	U	0.083	1.00
594-20-7	2,2-Dichloropropane	0.170	U	0.170	1.00
78-93-3	2-Butanone	0.142	U	0.142	5.00
95-49-8	2-Chlorotoluene	0.080	U	0.080	1.00
591-78-6	2-Hexanone	0.122	U	0.122	5.00
106-43-4	4-Chlorotoluene	0.124	U	0.124	1.00
99-87-6	4-Isopropyltoluene	0.070	U	0.070	1.00
108-10-1	4-Methyl-2-pentanone	0.120	U	0.120	5.00
67-64-1	Acetone	0.193	U	0.193	5.00
71-43-2	Benzene	0.111	U	0.111	1.00
108-86-1	Bromobenzene	0.145	U	0.145	1.00
74-97-5	Bromochloromethane	0.127	U	0.127	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MA01MW003

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV12

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220507

Lab File ID: 2141024/I7915

Date Collected: 10/21/14 Time: 1226

Date Received: 10/22/14

Date Analyzed: 10/24/14 Time: 2017

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 543720

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
75-27-4	Bromodichloromethane	0.083	U	0.083	1.00
75-25-2	Bromoform	0.215	U	0.215	1.00
74-83-9	Bromomethane	0.427	U	0.427	1.00
75-15-0	Carbon disulfide	0.190	U	0.190	1.00
56-23-5	Carbon tetrachloride	0.248	U	0.248	1.00
108-90-7	Chlorobenzene	0.083	U	0.083	1.00
75-00-3	Chloroethane	0.235	U	0.235	1.00
67-66-3	Chloroform	0.155	U	0.155	1.00
74-87-3	Chloromethane	0.144	U	0.144	1.00
74-95-3	Dibromomethane	0.211	U	0.211	1.00
75-71-8	Dichlorodifluoromethane	0.145	U	0.145	1.00
100-41-4	Ethylbenzene	0.109	U	0.109	1.00
87-68-3	Hexachlorobutadiene	0.265	U	0.265	1.00
98-82-8	Isopropylbenzene (Cumene)	0.130	U	0.130	1.00
75-09-2	Methylene chloride	0.149	U	0.149	5.00
91-20-3	Naphthalene	0.176	U	0.176	1.00
100-42-5	Styrene	0.089	U	0.089	1.00
127-18-4	Tetrachloroethene	0.193	U	0.193	1.00
108-88-3	Toluene	0.122	U	0.122	1.00
79-01-6	Trichloroethene	0.161	U	0.161	1.00
75-69-4	Trichlorofluoromethane	0.157	U	0.157	1.00
75-01-4	Vinyl chloride	0.127	U	0.127	1.00
156-59-2	cis-1,2-Dichloroethene	0.103	U	0.103	1.00
10061-01-5	cis-1,3-Dichloropropene	0.124	U	0.124	1.00
136777-61-	m,p-Xylene	0.123	U	0.123	2.00
104-51-8	n-Butylbenzene	0.123	U	0.123	1.00
103-65-1	n-Propylbenzene	0.727	U	0.727	1.00
95-47-6	o-Xylene	0.055	U	0.055	1.00
135-98-8	sec-Butylbenzene	0.107	U	0.107	1.00
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078	U	0.078	5.00
98-06-6	tert-Butylbenzene	0.087	U	0.087	1.00
156-60-5	trans-1,2-Dichloroethene	0.077	U	0.077	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MA01MW003

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV12

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220507

Lab File ID: 2141024/I7915

Date Collected: 10/21/14 Time: 1226

Date Received: 10/22/14

Date Analyzed: 10/24/14 Time: 2017

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 543720

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
10061-02-6	trans-1,3-Dichloropropene	0.128	U	0.128	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MA01MW003-c

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV12

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220508

Lab File ID: 2141024/I7916

Date Collected: 10/21/14 Time: 1226

Date Received: 10/22/14

Date Analyzed: 10/24/14 Time: 2040

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 543720

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
630-20-6	1,1,1,2-Tetrachloroethane	0.120	U	0.120	1.00
71-55-6	1,1,1-Trichloroethane	0.123	U	0.123	1.00
79-34-5	1,1,2,2-Tetrachloroethane	0.109	U	0.109	1.00
79-00-5	1,1,2-Trichloroethane	0.159	U	0.159	1.00
75-34-3	1,1-Dichloroethane	0.171	U	0.171	1.00
75-35-4	1,1-Dichloroethene	0.200	U	0.200	1.00
563-58-6	1,1-Dichloropropene	0.052	U	0.052	1.00
87-61-6	1,2,3-Trichlorobenzene	0.079	U	0.079	1.00
96-18-4	1,2,3-Trichloropropane	0.065	U	0.065	1.00
120-82-1	1,2,4-Trichlorobenzene	0.105	U	0.105	1.00
95-63-6	1,2,4-Trimethylbenzene	0.084	U	0.084	1.00
96-12-8	1,2-Dibromo-3-chloropropane	0.194	U	0.194	1.00
106-93-4	1,2-Dibromoethane	0.102	U	0.102	1.00
95-50-1	1,2-Dichlorobenzene	0.135	U	0.135	1.00
107-06-2	1,2-Dichloroethane	0.116	U	0.116	1.00
78-87-5	1,2-Dichloropropane	0.150	U	0.150	1.00
108-67-8	1,3,5-Trimethylbenzene	0.066	U	0.066	1.00
541-73-1	1,3-Dichlorobenzene	0.138	U	0.138	1.00
142-28-9	1,3-Dichloropropane	0.059	U	0.059	1.00
106-46-7	1,4-Dichlorobenzene	0.083	U	0.083	1.00
594-20-7	2,2-Dichloropropane	0.170	U	0.170	1.00
78-93-3	2-Butanone	0.142	U	0.142	5.00
95-49-8	2-Chlorotoluene	0.080	U	0.080	1.00
591-78-6	2-Hexanone	0.122	U	0.122	5.00
106-43-4	4-Chlorotoluene	0.124	U	0.124	1.00
99-87-6	4-Isopropyltoluene	0.070	U	0.070	1.00
108-10-1	4-Methyl-2-pentanone	0.120	U	0.120	5.00
67-64-1	Acetone	0.193	U	0.193	5.00
71-43-2	Benzene	0.111	U	0.111	1.00
108-86-1	Bromobenzene	0.145	U	0.145	1.00
74-97-5	Bromochloromethane	0.127	U	0.127	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MA01MW003-c

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV12

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220508

Lab File ID: 2141024/I7916

Date Collected: 10/21/14 Time: 1226

Date Received: 10/22/14

Date Analyzed: 10/24/14 Time: 2040

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 543720

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
75-27-4	Bromodichloromethane	0.083	U	0.083	1.00
75-25-2	Bromoform	0.215	U	0.215	1.00
74-83-9	Bromomethane	0.427	U	0.427	1.00
75-15-0	Carbon disulfide	0.190	U	0.190	1.00
56-23-5	Carbon tetrachloride	0.248	U	0.248	1.00
108-90-7	Chlorobenzene	0.083	U	0.083	1.00
75-00-3	Chloroethane	0.235	U	0.235	1.00
67-66-3	Chloroform	0.155	U	0.155	1.00
74-87-3	Chloromethane	0.144	U	0.144	1.00
74-95-3	Dibromomethane	0.211	U	0.211	1.00
75-71-8	Dichlorodifluoromethane	0.145	U	0.145	1.00
100-41-4	Ethylbenzene	0.109	U	0.109	1.00
87-68-3	Hexachlorobutadiene	0.265	U	0.265	1.00
98-82-8	Isopropylbenzene (Cumene)	0.130	U	0.130	1.00
75-09-2	Methylene chloride	0.149	U	0.149	5.00
91-20-3	Naphthalene	0.176	U	0.176	1.00
100-42-5	Styrene	0.089	U	0.089	1.00
127-18-4	Tetrachloroethene	0.193	U	0.193	1.00
108-88-3	Toluene	0.122	U	0.122	1.00
79-01-6	Trichloroethene	0.161	U	0.161	1.00
75-69-4	Trichlorofluoromethane	0.157	U	0.157	1.00
75-01-4	Vinyl chloride	0.127	U	0.127	1.00
156-59-2	cis-1,2-Dichloroethene	0.103	U	0.103	1.00
10061-01-5	cis-1,3-Dichloropropene	0.124	U	0.124	1.00
136777-61-	m,p-Xylene	0.123	U	0.123	2.00
104-51-8	n-Butylbenzene	0.123	U	0.123	1.00
103-65-1	n-Propylbenzene	0.727	U	0.727	1.00
95-47-6	o-Xylene	0.055	U	0.055	1.00
135-98-8	sec-Butylbenzene	0.107	U	0.107	1.00
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078	U	0.078	5.00
98-06-6	tert-Butylbenzene	0.087	U	0.087	1.00
156-60-5	trans-1,2-Dichloroethene	0.077	U	0.077	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MA01MW003-c

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV12

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220508

Lab File ID: 2141024/I7916

Date Collected: 10/21/14 Time: 1226

Date Received: 10/22/14

Date Analyzed: 10/24/14 Time: 2040

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 543720

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
10061-02-6	trans-1,3-Dichloropropene	0.128	U	0.128	1.00

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

M114MW002

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV12

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220509

Lab File ID: 2141024/I7917

Date Collected: 10/22/14 Time: 0935

Date Received: 10/23/14

Date Analyzed: 10/24/14 Time: 2102

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 543720

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
630-20-6	1,1,1,2-Tetrachloroethane	0.120	U	0.120	1.00
71-55-6	1,1,1-Trichloroethane	0.123	U	0.123	1.00
79-34-5	1,1,2,2-Tetrachloroethane	0.109	U	0.109	1.00
79-00-5	1,1,2-Trichloroethane	0.159	U	0.159	1.00
75-34-3	1,1-Dichloroethane	0.171	U	0.171	1.00
75-35-4	1,1-Dichloroethene	0.200	U	0.200	1.00
563-58-6	1,1-Dichloropropene	0.052	U	0.052	1.00
87-61-6	1,2,3-Trichlorobenzene	0.079	U	0.079	1.00
96-18-4	1,2,3-Trichloropropane	0.065	U	0.065	1.00
120-82-1	1,2,4-Trichlorobenzene	0.105	U	0.105	1.00
95-63-6	1,2,4-Trimethylbenzene	0.084	U	0.084	1.00
96-12-8	1,2-Dibromo-3-chloropropane	0.194	U	0.194	1.00
106-93-4	1,2-Dibromoethane	0.102	U	0.102	1.00
95-50-1	1,2-Dichlorobenzene	0.135	U	0.135	1.00
107-06-2	1,2-Dichloroethane	0.116	U	0.116	1.00
78-87-5	1,2-Dichloropropane	0.150	U	0.150	1.00
108-67-8	1,3,5-Trimethylbenzene	0.066	U	0.066	1.00
541-73-1	1,3-Dichlorobenzene	0.138	U	0.138	1.00
142-28-9	1,3-Dichloropropane	0.059	U	0.059	1.00
106-46-7	1,4-Dichlorobenzene	0.083	U	0.083	1.00
594-20-7	2,2-Dichloropropane	0.170	U	0.170	1.00
78-93-3	2-Butanone	0.142	U	0.142	5.00
95-49-8	2-Chlorotoluene	0.080	U	0.080	1.00
591-78-6	2-Hexanone	0.122	U	0.122	5.00
106-43-4	4-Chlorotoluene	0.124	U	0.124	1.00
99-87-6	4-Isopropyltoluene	0.070	U	0.070	1.00
108-10-1	4-Methyl-2-pentanone	0.120	U	0.120	5.00
67-64-1	Acetone	0.193	U	0.193	5.00
71-43-2	Benzene	0.111	U	0.111	1.00
108-86-1	Bromobenzene	0.145	U	0.145	1.00
74-97-5	Bromochloromethane	0.127	U	0.127	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

M114MW002

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV12

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220509

Lab File ID: 2141024/I7917

Date Collected: 10/22/14 Time: 0935

Date Received: 10/23/14

Date Analyzed: 10/24/14 Time: 2102

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 543720

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
75-27-4	Bromodichloromethane	0.083	U	0.083	1.00
75-25-2	Bromoform	0.215	U	0.215	1.00
74-83-9	Bromomethane	0.427	U	0.427	1.00
75-15-0	Carbon disulfide	0.190	U	0.190	1.00
56-23-5	Carbon tetrachloride	0.248	U	0.248	1.00
108-90-7	Chlorobenzene	0.083	U	0.083	1.00
75-00-3	Chloroethane	0.235	U	0.235	1.00
67-66-3	Chloroform	0.155	U	0.155	1.00
74-87-3	Chloromethane	0.144	U	0.144	1.00
74-95-3	Dibromomethane	0.211	U	0.211	1.00
75-71-8	Dichlorodifluoromethane	0.145	U	0.145	1.00
100-41-4	Ethylbenzene	0.109	U	0.109	1.00
87-68-3	Hexachlorobutadiene	0.265	U	0.265	1.00
98-82-8	Isopropylbenzene (Cumene)	0.130	U	0.130	1.00
75-09-2	Methylene chloride	0.149	U	0.149	5.00
91-20-3	Naphthalene	0.176	U	0.176	1.00
100-42-5	Styrene	0.089	U	0.089	1.00
127-18-4	Tetrachloroethene	0.193	U	0.193	1.00
108-88-3	Toluene	0.122	U	0.122	1.00
79-01-6	Trichloroethene	0.161	U	0.161	1.00
75-69-4	Trichlorofluoromethane	0.157	U	0.157	1.00
75-01-4	Vinyl chloride	0.127	U	0.127	1.00
156-59-2	cis-1,2-Dichloroethene	0.103	U	0.103	1.00
10061-01-5	cis-1,3-Dichloropropene	0.124	U	0.124	1.00
136777-61-	m,p-Xylene	0.123	U	0.123	2.00
104-51-8	n-Butylbenzene	0.123	U	0.123	1.00
103-65-1	n-Propylbenzene	0.727	U	0.727	1.00
95-47-6	o-Xylene	0.055	U	0.055	1.00
135-98-8	sec-Butylbenzene	0.107	U	0.107	1.00
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078	U	0.078	5.00
98-06-6	tert-Butylbenzene	0.087	U	0.087	1.00
156-60-5	trans-1,2-Dichloroethene	0.077	U	0.077	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

M114MW002

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV12

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220509

Lab File ID: 2141024/I7917

Date Collected: 10/22/14 Time: 0935

Date Received: 10/23/14

Date Analyzed: 10/24/14 Time: 2102

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 543720

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
10061-02-6	trans-1,3-Dichloropropene	0.128	U	0.128	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

M114MW002-c

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV12

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220510

Lab File ID: 2141024/I7918

Date Collected: 10/22/14 Time: 0935

Date Received: 10/23/14

Date Analyzed: 10/24/14 Time: 2125

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 543720

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
630-20-6	1,1,1,2-Tetrachloroethane	0.120	U	0.120	1.00
71-55-6	1,1,1-Trichloroethane	0.123	U	0.123	1.00
79-34-5	1,1,2,2-Tetrachloroethane	0.109	U	0.109	1.00
79-00-5	1,1,2-Trichloroethane	0.159	U	0.159	1.00
75-34-3	1,1-Dichloroethane	0.171	U	0.171	1.00
75-35-4	1,1-Dichloroethene	0.200	U	0.200	1.00
563-58-6	1,1-Dichloropropene	0.052	U	0.052	1.00
87-61-6	1,2,3-Trichlorobenzene	0.079	U	0.079	1.00
96-18-4	1,2,3-Trichloropropane	0.065	U	0.065	1.00
120-82-1	1,2,4-Trichlorobenzene	0.105	U	0.105	1.00
95-63-6	1,2,4-Trimethylbenzene	0.084	U	0.084	1.00
96-12-8	1,2-Dibromo-3-chloropropane	0.194	U	0.194	1.00
106-93-4	1,2-Dibromoethane	0.102	U	0.102	1.00
95-50-1	1,2-Dichlorobenzene	0.135	U	0.135	1.00
107-06-2	1,2-Dichloroethane	0.116	U	0.116	1.00
78-87-5	1,2-Dichloropropane	0.150	U	0.150	1.00
108-67-8	1,3,5-Trimethylbenzene	0.066	U	0.066	1.00
541-73-1	1,3-Dichlorobenzene	0.138	U	0.138	1.00
142-28-9	1,3-Dichloropropane	0.059	U	0.059	1.00
106-46-7	1,4-Dichlorobenzene	0.083	U	0.083	1.00
594-20-7	2,2-Dichloropropane	0.170	U	0.170	1.00
78-93-3	2-Butanone	0.142	U	0.142	5.00
95-49-8	2-Chlorotoluene	0.080	U	0.080	1.00
591-78-6	2-Hexanone	0.122	U	0.122	5.00
106-43-4	4-Chlorotoluene	0.124	U	0.124	1.00
99-87-6	4-Isopropyltoluene	0.070	U	0.070	1.00
108-10-1	4-Methyl-2-pentanone	0.120	U	0.120	5.00
67-64-1	Acetone	0.193	U	0.193	5.00
71-43-2	Benzene	0.111	U	0.111	1.00
108-86-1	Bromobenzene	0.145	U	0.145	1.00
74-97-5	Bromochloromethane	0.127	U	0.127	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

M114MW002-c

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV12

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220510

Lab File ID: 2141024/I7918

Date Collected: 10/22/14 Time: 0935

Date Received: 10/23/14

Date Analyzed: 10/24/14 Time: 2125

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 543720

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
75-27-4	Bromodichloromethane	0.083	U	0.083	1.00
75-25-2	Bromoform	0.215	U	0.215	1.00
74-83-9	Bromomethane	0.427	U	0.427	1.00
75-15-0	Carbon disulfide	0.190	U	0.190	1.00
56-23-5	Carbon tetrachloride	0.248	U	0.248	1.00
108-90-7	Chlorobenzene	0.083	U	0.083	1.00
75-00-3	Chloroethane	0.235	U	0.235	1.00
67-66-3	Chloroform	0.155	U	0.155	1.00
74-87-3	Chloromethane	0.144	U	0.144	1.00
74-95-3	Dibromomethane	0.211	U	0.211	1.00
75-71-8	Dichlorodifluoromethane	0.145	U	0.145	1.00
100-41-4	Ethylbenzene	0.109	U	0.109	1.00
87-68-3	Hexachlorobutadiene	0.265	U	0.265	1.00
98-82-8	Isopropylbenzene (Cumene)	0.130	U	0.130	1.00
75-09-2	Methylene chloride	0.149	U	0.149	5.00
91-20-3	Naphthalene	0.176	U	0.176	1.00
100-42-5	Styrene	0.089	U	0.089	1.00
127-18-4	Tetrachloroethene	0.193	U	0.193	1.00
108-88-3	Toluene	0.122	U	0.122	1.00
79-01-6	Trichloroethene	0.161	U	0.161	1.00
75-69-4	Trichlorofluoromethane	0.157	U	0.157	1.00
75-01-4	Vinyl chloride	0.127	U	0.127	1.00
156-59-2	cis-1,2-Dichloroethene	0.103	U	0.103	1.00
10061-01-5	cis-1,3-Dichloropropene	0.124	U	0.124	1.00
136777-61-	m,p-Xylene	0.123	U	0.123	2.00
104-51-8	n-Butylbenzene	0.123	U	0.123	1.00
103-65-1	n-Propylbenzene	0.727	U	0.727	1.00
95-47-6	o-Xylene	0.055	U	0.055	1.00
135-98-8	sec-Butylbenzene	0.107	U	0.107	1.00
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078	U	0.078	5.00
98-06-6	tert-Butylbenzene	0.087	U	0.087	1.00
156-60-5	trans-1,2-Dichloroethene	0.077	U	0.077	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

M114MW002-c

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV12

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220510

Lab File ID: 2141024/I7918

Date Collected: 10/22/14 Time: 0935

Date Received: 10/23/14

Date Analyzed: 10/24/14 Time: 2125

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 543720

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
10061-02-6	trans-1,3-Dichloropropene	0.128	U	0.128	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

M114MW003

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV9

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220511

Lab File ID: 2141029p/j5247

Date Collected: 10/22/14 Time: 1110

Date Received: 10/23/14

Date Analyzed: 10/29/14 Time: 2302

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 544000

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
630-20-6	1,1,1,2-Tetrachloroethane	0.120	U	0.120	1.00
71-55-6	1,1,1-Trichloroethane	0.123	U	0.123	1.00
79-34-5	1,1,2,2-Tetrachloroethane	0.109	U	0.109	1.00
79-00-5	1,1,2-Trichloroethane	0.159	U	0.159	1.00
75-34-3	1,1-Dichloroethane	0.171	U	0.171	1.00
75-35-4	1,1-Dichloroethene	0.200	U	0.200	1.00
563-58-6	1,1-Dichloropropene	0.052	U	0.052	1.00
87-61-6	1,2,3-Trichlorobenzene	0.079	U	0.079	1.00
96-18-4	1,2,3-Trichloropropane	0.065	U	0.065	1.00
120-82-1	1,2,4-Trichlorobenzene	0.105	U	0.105	1.00
95-63-6	1,2,4-Trimethylbenzene	0.084	U	0.084	1.00
96-12-8	1,2-Dibromo-3-chloropropane	0.194	U	0.194	1.00
106-93-4	1,2-Dibromoethane	0.102	U	0.102	1.00
95-50-1	1,2-Dichlorobenzene	0.135	U	0.135	1.00
107-06-2	1,2-Dichloroethane	0.116	U	0.116	1.00
78-87-5	1,2-Dichloropropane	0.150	U	0.150	1.00
108-67-8	1,3,5-Trimethylbenzene	0.066	U	0.066	1.00
541-73-1	1,3-Dichlorobenzene	0.138	U	0.138	1.00
142-28-9	1,3-Dichloropropane	0.059	U	0.059	1.00
106-46-7	1,4-Dichlorobenzene	0.083	U	0.083	1.00
594-20-7	2,2-Dichloropropane	0.170	U	0.170	1.00
78-93-3	2-Butanone	0.142	U	0.142	5.00
95-49-8	2-Chlorotoluene	0.080	U	0.080	1.00
591-78-6	2-Hexanone	0.122	U	0.122	5.00
106-43-4	4-Chlorotoluene	0.124	U	0.124	1.00
99-87-6	4-Isopropyltoluene	0.070	U	0.070	1.00
108-10-1	4-Methyl-2-pentanone	0.120	U	0.120	5.00
67-64-1	Acetone	0.193	U	0.193	5.00
71-43-2	Benzene	0.111	U	0.111	1.00
108-86-1	Bromobenzene	0.145	U	0.145	1.00
74-97-5	Bromochloromethane	0.127	U	0.127	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

M114MW003

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV9

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220511

Lab File ID: 2141029p/j5247

Date Collected: 10/22/14 Time: 1110

Date Received: 10/23/14

Date Analyzed: 10/29/14 Time: 2302

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 544000

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
75-27-4	Bromodichloromethane	0.083	U	0.083	1.00
75-25-2	Bromoform	0.215	U	0.215	1.00
74-83-9	Bromomethane	0.427	U	0.427	1.00
75-15-0	Carbon disulfide	0.190	U	0.190	1.00
56-23-5	Carbon tetrachloride	0.248	U	0.248	1.00
108-90-7	Chlorobenzene	0.083	U	0.083	1.00
75-00-3	Chloroethane	0.235	U	0.235	1.00
67-66-3	Chloroform	0.155	U	0.155	1.00
74-87-3	Chloromethane	0.144	U	0.144	1.00
74-95-3	Dibromomethane	0.211	U	0.211	1.00
75-71-8	Dichlorodifluoromethane	0.145	U	0.145	1.00
100-41-4	Ethylbenzene	0.109	U	0.109	1.00
87-68-3	Hexachlorobutadiene	0.265	U	0.265	1.00
98-82-8	Isopropylbenzene (Cumene)	0.130	U	0.130	1.00
75-09-2	Methylene chloride	0.149	U	0.149	5.00
91-20-3	Naphthalene	0.176	U	0.176	1.00
100-42-5	Styrene	0.089	U	0.089	1.00
127-18-4	Tetrachloroethene	0.193	U	0.193	1.00
108-88-3	Toluene	0.122	U	0.122	1.00
79-01-6	Trichloroethene	0.161	U	0.161	1.00
75-69-4	Trichlorofluoromethane	0.157	U	0.157	1.00
75-01-4	Vinyl chloride	0.127	U	0.127	1.00
156-59-2	cis-1,2-Dichloroethene	0.103	U	0.103	1.00
10061-01-5	cis-1,3-Dichloropropene	0.124	U	0.124	1.00
136777-61-	m,p-Xylene	0.123	U	0.123	2.00
104-51-8	n-Butylbenzene	0.123	U	0.123	1.00
103-65-1	n-Propylbenzene	0.727	U	0.727	1.00
95-47-6	o-Xylene	0.055	U	0.055	1.00
135-98-8	sec-Butylbenzene	0.107	U	0.107	1.00
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078	U	0.078	5.00
98-06-6	tert-Butylbenzene	0.087	U	0.087	1.00
156-60-5	trans-1,2-Dichloroethene	0.077	U	0.077	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

M114MW003

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV9

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220511

Lab File ID: 2141029p/j5247

Date Collected: 10/22/14 Time: 1110

Date Received: 10/23/14

Date Analyzed: 10/29/14 Time: 2302

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 544000

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
10061-02-6	trans-1,3-Dichloropropene	0.128	U	0.128	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

M114MW004

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV9

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220512

Lab File ID: 2141029p/j5248

Date Collected: 10/22/14 Time: 1025

Date Received: 10/23/14

Date Analyzed: 10/29/14 Time: 2322

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 544000

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
630-20-6	1,1,1,2-Tetrachloroethane	0.120	U	0.120	1.00
71-55-6	1,1,1-Trichloroethane	0.123	U	0.123	1.00
79-34-5	1,1,2,2-Tetrachloroethane	0.109	U	0.109	1.00
79-00-5	1,1,2-Trichloroethane	0.159	U	0.159	1.00
75-34-3	1,1-Dichloroethane	0.171	U	0.171	1.00
75-35-4	1,1-Dichloroethene	0.200	U	0.200	1.00
563-58-6	1,1-Dichloropropene	0.052	U	0.052	1.00
87-61-6	1,2,3-Trichlorobenzene	0.079	U	0.079	1.00
96-18-4	1,2,3-Trichloropropane	0.065	U	0.065	1.00
120-82-1	1,2,4-Trichlorobenzene	0.105	U	0.105	1.00
95-63-6	1,2,4-Trimethylbenzene	0.084	U	0.084	1.00
96-12-8	1,2-Dibromo-3-chloropropane	0.194	U	0.194	1.00
106-93-4	1,2-Dibromoethane	0.102	U	0.102	1.00
95-50-1	1,2-Dichlorobenzene	0.135	U	0.135	1.00
107-06-2	1,2-Dichloroethane	0.116	U	0.116	1.00
78-87-5	1,2-Dichloropropane	0.150	U	0.150	1.00
108-67-8	1,3,5-Trimethylbenzene	0.066	U	0.066	1.00
541-73-1	1,3-Dichlorobenzene	0.138	U	0.138	1.00
142-28-9	1,3-Dichloropropane	0.059	U	0.059	1.00
106-46-7	1,4-Dichlorobenzene	0.083	U	0.083	1.00
594-20-7	2,2-Dichloropropane	0.170	U	0.170	1.00
78-93-3	2-Butanone	0.142	U	0.142	5.00
95-49-8	2-Chlorotoluene	0.080	U	0.080	1.00
591-78-6	2-Hexanone	0.122	U	0.122	5.00
106-43-4	4-Chlorotoluene	0.124	U	0.124	1.00
99-87-6	4-Isopropyltoluene	0.070	U	0.070	1.00
108-10-1	4-Methyl-2-pentanone	0.120	U	0.120	5.00
67-64-1	Acetone	0.193	U	0.193	5.00
71-43-2	Benzene	0.111	U	0.111	1.00
108-86-1	Bromobenzene	0.145	U	0.145	1.00
74-97-5	Bromochloromethane	0.127	U	0.127	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

M114MW004

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV9

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220512

Lab File ID: 2141029p/j5248

Date Collected: 10/22/14 Time: 1025

Date Received: 10/23/14

Date Analyzed: 10/29/14 Time: 2322

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 544000

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
75-27-4	Bromodichloromethane	0.083	U	0.083	1.00
75-25-2	Bromoform	0.215	U	0.215	1.00
74-83-9	Bromomethane	0.427	U	0.427	1.00
75-15-0	Carbon disulfide	0.190	U	0.190	1.00
56-23-5	Carbon tetrachloride	0.248	U	0.248	1.00
108-90-7	Chlorobenzene	0.083	U	0.083	1.00
75-00-3	Chloroethane	0.235	U	0.235	1.00
67-66-3	Chloroform	0.155	U	0.155	1.00
74-87-3	Chloromethane	0.144	U	0.144	1.00
74-95-3	Dibromomethane	0.211	U	0.211	1.00
75-71-8	Dichlorodifluoromethane	0.145	U	0.145	1.00
100-41-4	Ethylbenzene	0.109	U	0.109	1.00
87-68-3	Hexachlorobutadiene	0.265	U	0.265	1.00
98-82-8	Isopropylbenzene (Cumene)	0.130	U	0.130	1.00
75-09-2	Methylene chloride	0.149	U	0.149	5.00
91-20-3	Naphthalene	0.176	U	0.176	1.00
100-42-5	Styrene	0.089	U	0.089	1.00
127-18-4	Tetrachloroethene	0.193	U	0.193	1.00
108-88-3	Toluene	0.122	U	0.122	1.00
79-01-6	Trichloroethene	0.161	U	0.161	1.00
75-69-4	Trichlorofluoromethane	0.157	U	0.157	1.00
75-01-4	Vinyl chloride	0.127	U	0.127	1.00
156-59-2	cis-1,2-Dichloroethene	0.103	U	0.103	1.00
10061-01-5	cis-1,3-Dichloropropene	0.124	U	0.124	1.00
136777-61-	m,p-Xylene	0.123	U	0.123	2.00
104-51-8	n-Butylbenzene	0.123	U	0.123	1.00
103-65-1	n-Propylbenzene	0.727	U	0.727	1.00
95-47-6	o-Xylene	0.055	U	0.055	1.00
135-98-8	sec-Butylbenzene	0.107	U	0.107	1.00
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078	U	0.078	5.00
98-06-6	tert-Butylbenzene	0.087	U	0.087	1.00
156-60-5	trans-1,2-Dichloroethene	0.077	U	0.077	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

M114MW004

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV9

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220512

Lab File ID: 2141029p/j5248

Date Collected: 10/22/14 Time: 1025

Date Received: 10/23/14

Date Analyzed: 10/29/14 Time: 2322

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 544000

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
10061-02-6	trans-1,3-Dichloropropene	0.128	U	0.128	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

M114MW004-c

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV9

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220513

Lab File ID: 2141029p/j5249

Date Collected: 10/22/14 Time: 1025

Date Received: 10/23/14

Date Analyzed: 10/29/14 Time: 2342

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 544000

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
630-20-6	1,1,1,2-Tetrachloroethane	0.120	U	0.120	1.00
71-55-6	1,1,1-Trichloroethane	0.123	U	0.123	1.00
79-34-5	1,1,2,2-Tetrachloroethane	0.109	U	0.109	1.00
79-00-5	1,1,2-Trichloroethane	0.159	U	0.159	1.00
75-34-3	1,1-Dichloroethane	0.171	U	0.171	1.00
75-35-4	1,1-Dichloroethene	0.200	U	0.200	1.00
563-58-6	1,1-Dichloropropene	0.052	U	0.052	1.00
87-61-6	1,2,3-Trichlorobenzene	0.079	U	0.079	1.00
96-18-4	1,2,3-Trichloropropane	0.065	U	0.065	1.00
120-82-1	1,2,4-Trichlorobenzene	0.105	U	0.105	1.00
95-63-6	1,2,4-Trimethylbenzene	0.084	U	0.084	1.00
96-12-8	1,2-Dibromo-3-chloropropane	0.194	U	0.194	1.00
106-93-4	1,2-Dibromoethane	0.102	U	0.102	1.00
95-50-1	1,2-Dichlorobenzene	0.135	U	0.135	1.00
107-06-2	1,2-Dichloroethane	0.116	U	0.116	1.00
78-87-5	1,2-Dichloropropane	0.150	U	0.150	1.00
108-67-8	1,3,5-Trimethylbenzene	0.066	U	0.066	1.00
541-73-1	1,3-Dichlorobenzene	0.138	U	0.138	1.00
142-28-9	1,3-Dichloropropane	0.059	U	0.059	1.00
106-46-7	1,4-Dichlorobenzene	0.083	U	0.083	1.00
594-20-7	2,2-Dichloropropane	0.170	U	0.170	1.00
78-93-3	2-Butanone	0.142	U	0.142	5.00
95-49-8	2-Chlorotoluene	0.080	U	0.080	1.00
591-78-6	2-Hexanone	0.122	U	0.122	5.00
106-43-4	4-Chlorotoluene	0.124	U	0.124	1.00
99-87-6	4-Isopropyltoluene	0.070	U	0.070	1.00
108-10-1	4-Methyl-2-pentanone	0.120	U	0.120	5.00
67-64-1	Acetone	0.193	U	0.193	5.00
71-43-2	Benzene	0.111	U	0.111	1.00
108-86-1	Bromobenzene	0.145	U	0.145	1.00
74-97-5	Bromochloromethane	0.127	U	0.127	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

M114MW004-c

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV9

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220513

Lab File ID: 2141029p/j5249

Date Collected: 10/22/14 Time: 1025

Date Received: 10/23/14

Date Analyzed: 10/29/14 Time: 2342

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 544000

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
75-27-4	Bromodichloromethane	0.083	U	0.083	1.00
75-25-2	Bromoform	0.215	U	0.215	1.00
74-83-9	Bromomethane	0.427	U	0.427	1.00
75-15-0	Carbon disulfide	0.190	U	0.190	1.00
56-23-5	Carbon tetrachloride	0.248	U	0.248	1.00
108-90-7	Chlorobenzene	0.083	U	0.083	1.00
75-00-3	Chloroethane	0.235	U	0.235	1.00
67-66-3	Chloroform	0.155	U	0.155	1.00
74-87-3	Chloromethane	0.144	U	0.144	1.00
74-95-3	Dibromomethane	0.211	U	0.211	1.00
75-71-8	Dichlorodifluoromethane	0.145	U	0.145	1.00
100-41-4	Ethylbenzene	0.109	U	0.109	1.00
87-68-3	Hexachlorobutadiene	0.265	U	0.265	1.00
98-82-8	Isopropylbenzene (Cumene)	0.130	U	0.130	1.00
75-09-2	Methylene chloride	0.149	U	0.149	5.00
91-20-3	Naphthalene	0.176	U	0.176	1.00
100-42-5	Styrene	0.089	U	0.089	1.00
127-18-4	Tetrachloroethene	0.193	U	0.193	1.00
108-88-3	Toluene	0.122	U	0.122	1.00
79-01-6	Trichloroethene	0.161	U	0.161	1.00
75-69-4	Trichlorofluoromethane	0.157	U	0.157	1.00
75-01-4	Vinyl chloride	0.127	U	0.127	1.00
156-59-2	cis-1,2-Dichloroethene	0.103	U	0.103	1.00
10061-01-5	cis-1,3-Dichloropropene	0.124	U	0.124	1.00
136777-61-	m,p-Xylene	0.123	U	0.123	2.00
104-51-8	n-Butylbenzene	0.123	U	0.123	1.00
103-65-1	n-Propylbenzene	0.727	U	0.727	1.00
95-47-6	o-Xylene	0.055	U	0.055	1.00
135-98-8	sec-Butylbenzene	0.107	U	0.107	1.00
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078	U	0.078	5.00
98-06-6	tert-Butylbenzene	0.087	U	0.087	1.00
156-60-5	trans-1,2-Dichloroethene	0.077	U	0.077	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

M114MW004-c

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV9

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220513

Lab File ID: 2141029p/j5249

Date Collected: 10/22/14 Time: 1025

Date Received: 10/23/14

Date Analyzed: 10/29/14 Time: 2342

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 544000

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
10061-02-6	trans-1,3-Dichloropropene	0.128	U	0.128	1.00

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

M114MW001

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV9

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220514

Lab File ID: 2141029p/j5250

Date Collected: 10/22/14 Time: 1235

Date Received: 10/23/14

Date Analyzed: 10/30/14 Time: 0002

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 544000

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
630-20-6	1,1,1,2-Tetrachloroethane	0.120	U	0.120	1.00
71-55-6	1,1,1-Trichloroethane	0.123	U	0.123	1.00
79-34-5	1,1,2,2-Tetrachloroethane	0.109	U	0.109	1.00
79-00-5	1,1,2-Trichloroethane	0.159	U	0.159	1.00
75-34-3	1,1-Dichloroethane	0.171	U	0.171	1.00
75-35-4	1,1-Dichloroethene	0.200	U	0.200	1.00
563-58-6	1,1-Dichloropropene	0.052	U	0.052	1.00
87-61-6	1,2,3-Trichlorobenzene	0.079	U	0.079	1.00
96-18-4	1,2,3-Trichloropropane	0.065	U	0.065	1.00
120-82-1	1,2,4-Trichlorobenzene	0.105	U	0.105	1.00
95-63-6	1,2,4-Trimethylbenzene	0.084	U	0.084	1.00
96-12-8	1,2-Dibromo-3-chloropropane	0.194	U	0.194	1.00
106-93-4	1,2-Dibromoethane	0.102	U	0.102	1.00
95-50-1	1,2-Dichlorobenzene	0.135	U	0.135	1.00
107-06-2	1,2-Dichloroethane	0.116	U	0.116	1.00
78-87-5	1,2-Dichloropropane	0.150	U	0.150	1.00
108-67-8	1,3,5-Trimethylbenzene	0.066	U	0.066	1.00
541-73-1	1,3-Dichlorobenzene	0.138	U	0.138	1.00
142-28-9	1,3-Dichloropropane	0.059	U	0.059	1.00
106-46-7	1,4-Dichlorobenzene	0.083	U	0.083	1.00
594-20-7	2,2-Dichloropropane	0.170	U	0.170	1.00
78-93-3	2-Butanone	0.142	U	0.142	5.00
95-49-8	2-Chlorotoluene	0.080	U	0.080	1.00
591-78-6	2-Hexanone	0.122	U	0.122	5.00
106-43-4	4-Chlorotoluene	0.124	U	0.124	1.00
99-87-6	4-Isopropyltoluene	0.070	U	0.070	1.00
108-10-1	4-Methyl-2-pentanone	0.120	U	0.120	5.00
67-64-1	Acetone	0.193	U	0.193	5.00
71-43-2	Benzene	0.111	U	0.111	1.00
108-86-1	Bromobenzene	0.145	U	0.145	1.00
74-97-5	Bromochloromethane	0.127	U	0.127	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

M114MW001

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV9

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220514

Lab File ID: 2141029p/j5250

Date Collected: 10/22/14 Time: 1235

Date Received: 10/23/14

Date Analyzed: 10/30/14 Time: 0002

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 544000

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
75-27-4	Bromodichloromethane	0.083	U	0.083	1.00
75-25-2	Bromoform	0.215	U	0.215	1.00
74-83-9	Bromomethane	0.427	U	0.427	1.00
75-15-0	Carbon disulfide	0.190	U	0.190	1.00
56-23-5	Carbon tetrachloride	0.248	U	0.248	1.00
108-90-7	Chlorobenzene	0.083	U	0.083	1.00
75-00-3	Chloroethane	0.235	U	0.235	1.00
67-66-3	Chloroform	0.155	U	0.155	1.00
74-87-3	Chloromethane	0.144	U	0.144	1.00
74-95-3	Dibromomethane	0.211	U	0.211	1.00
75-71-8	Dichlorodifluoromethane	0.145	U	0.145	1.00
100-41-4	Ethylbenzene	0.109	U	0.109	1.00
87-68-3	Hexachlorobutadiene	0.265	U	0.265	1.00
98-82-8	Isopropylbenzene (Cumene)	0.130	U	0.130	1.00
75-09-2	Methylene chloride	0.149	U	0.149	5.00
91-20-3	Naphthalene	0.176	U	0.176	1.00
100-42-5	Styrene	0.089	U	0.089	1.00
127-18-4	Tetrachloroethene	0.193	U	0.193	1.00
108-88-3	Toluene	0.122	U	0.122	1.00
79-01-6	Trichloroethene	0.161	U	0.161	1.00
75-69-4	Trichlorofluoromethane	0.157	U	0.157	1.00
75-01-4	Vinyl chloride	0.127	U	0.127	1.00
156-59-2	cis-1,2-Dichloroethene	0.103	U	0.103	1.00
10061-01-5	cis-1,3-Dichloropropene	0.124	U	0.124	1.00
136777-61-	m,p-Xylene	0.123	U	0.123	2.00
104-51-8	n-Butylbenzene	0.123	U	0.123	1.00
103-65-1	n-Propylbenzene	0.727	U	0.727	1.00
95-47-6	o-Xylene	0.055	U	0.055	1.00
135-98-8	sec-Butylbenzene	0.107	U	0.107	1.00
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078	U	0.078	5.00
98-06-6	tert-Butylbenzene	0.087	U	0.087	1.00
156-60-5	trans-1,2-Dichloroethene	0.077	U	0.077	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

M114MW001

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV9

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220514

Lab File ID: 2141029p/j5250

Date Collected: 10/22/14 Time: 1235

Date Received: 10/23/14

Date Analyzed: 10/30/14 Time: 0002

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 544000

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
10061-02-6	trans-1,3-Dichloropropene	0.128	U	0.128	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MWQ-24

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV9

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220515

Lab File ID: 2141029p/j5243

Date Collected: 10/23/14 Time: 0932

Date Received: 10/24/14

Date Analyzed: 10/29/14 Time: 2141

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 544000

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
630-20-6	1,1,1,2-Tetrachloroethane	0.120	U	0.120	1.00
71-55-6	1,1,1-Trichloroethane	0.123	U	0.123	1.00
79-34-5	1,1,2,2-Tetrachloroethane	0.109	U	0.109	1.00
79-00-5	1,1,2-Trichloroethane	0.159	U	0.159	1.00
75-34-3	1,1-Dichloroethane	0.171	U	0.171	1.00
75-35-4	1,1-Dichloroethene	0.200	U	0.200	1.00
563-58-6	1,1-Dichloropropene	0.052	U	0.052	1.00
87-61-6	1,2,3-Trichlorobenzene	0.079	U	0.079	1.00
96-18-4	1,2,3-Trichloropropane	0.065	U	0.065	1.00
120-82-1	1,2,4-Trichlorobenzene	0.105	U	0.105	1.00
95-63-6	1,2,4-Trimethylbenzene	0.084	U	0.084	1.00
96-12-8	1,2-Dibromo-3-chloropropane	0.194	U	0.194	1.00
106-93-4	1,2-Dibromoethane	0.102	U	0.102	1.00
95-50-1	1,2-Dichlorobenzene	0.135	U	0.135	1.00
107-06-2	1,2-Dichloroethane	0.116	U	0.116	1.00
78-87-5	1,2-Dichloropropane	0.150	U	0.150	1.00
108-67-8	1,3,5-Trimethylbenzene	0.066	U	0.066	1.00
541-73-1	1,3-Dichlorobenzene	0.138	U	0.138	1.00
142-28-9	1,3-Dichloropropane	0.059	U	0.059	1.00
106-46-7	1,4-Dichlorobenzene	0.083	U	0.083	1.00
594-20-7	2,2-Dichloropropane	0.170	U	0.170	1.00
78-93-3	2-Butanone	0.142	U	0.142	5.00
95-49-8	2-Chlorotoluene	0.080	U	0.080	1.00
591-78-6	2-Hexanone	0.122	U	0.122	5.00
106-43-4	4-Chlorotoluene	0.124	U	0.124	1.00
99-87-6	4-Isopropyltoluene	0.070	U	0.070	1.00
108-10-1	4-Methyl-2-pentanone	0.120	U	0.120	5.00
67-64-1	Acetone	0.193	U	0.193	5.00
71-43-2	Benzene	0.111	U	0.111	1.00
108-86-1	Bromobenzene	0.145	U	0.145	1.00
74-97-5	Bromochloromethane	0.127	U	0.127	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MWQ-24

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV9

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220515

Lab File ID: 2141029p/j5243

Date Collected: 10/23/14 Time: 0932

Date Received: 10/24/14

Date Analyzed: 10/29/14 Time: 2141

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 544000

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
75-27-4	Bromodichloromethane	0.083	U	0.083	1.00
75-25-2	Bromoform	0.215	U	0.215	1.00
74-83-9	Bromomethane	0.427	U	0.427	1.00
75-15-0	Carbon disulfide	0.190	U	0.190	1.00
56-23-5	Carbon tetrachloride	0.248	U	0.248	1.00
108-90-7	Chlorobenzene	0.083	U	0.083	1.00
75-00-3	Chloroethane	0.235	U	0.235	1.00
67-66-3	Chloroform	0.155	U	0.155	1.00
74-87-3	Chloromethane	0.144	U	0.144	1.00
74-95-3	Dibromomethane	0.211	U	0.211	1.00
75-71-8	Dichlorodifluoromethane	0.145	U	0.145	1.00
100-41-4	Ethylbenzene	0.109	U	0.109	1.00
87-68-3	Hexachlorobutadiene	0.265	U	0.265	1.00
98-82-8	Isopropylbenzene (Cumene)	0.130	U	0.130	1.00
75-09-2	Methylene chloride	0.149	U	0.149	5.00
91-20-3	Naphthalene	0.176	U	0.176	1.00
100-42-5	Styrene	0.089	U	0.089	1.00
127-18-4	Tetrachloroethene	0.193	U	0.193	1.00
108-88-3	Toluene	0.122	U	0.122	1.00
79-01-6	Trichloroethene	0.161	U	0.161	1.00
75-69-4	Trichlorofluoromethane	0.157	U	0.157	1.00
75-01-4	Vinyl chloride	0.127	U	0.127	1.00
156-59-2	cis-1,2-Dichloroethene	0.103	U	0.103	1.00
10061-01-5	cis-1,3-Dichloropropene	0.124	U	0.124	1.00
136777-61-	m,p-Xylene	0.123	U	0.123	2.00
104-51-8	n-Butylbenzene	0.123	U	0.123	1.00
103-65-1	n-Propylbenzene	0.727	U	0.727	1.00
95-47-6	o-Xylene	0.055	U	0.055	1.00
135-98-8	sec-Butylbenzene	0.107	U	0.107	1.00
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078	U	0.078	5.00
98-06-6	tert-Butylbenzene	0.087	U	0.087	1.00
156-60-5	trans-1,2-Dichloroethene	0.077	U	0.077	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MWQ-24

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV9

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220515

Lab File ID: 2141029p/j5243

Date Collected: 10/23/14 Time: 0932

Date Received: 10/24/14

Date Analyzed: 10/29/14 Time: 2141

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 544000

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
10061-02-6	trans-1,3-Dichloropropene	0.128	U	0.128	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MWQ-24-ms

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV9

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220516

Lab File ID: 2141029p/j5244ms

Date Collected: 10/23/14 Time: 0932

Date Received: 10/24/14

Date Analyzed: 10/29/14 Time: 2201

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 544000

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
630-20-6	1,1,1,2-Tetrachloroethane	47.1		0.120	1.00
71-55-6	1,1,1-Trichloroethane	47.7		0.123	1.00
79-34-5	1,1,2,2-Tetrachloroethane	49.4		0.109	1.00
79-00-5	1,1,2-Trichloroethane	45.9		0.159	1.00
75-34-3	1,1-Dichloroethane	48.8		0.171	1.00
75-35-4	1,1-Dichloroethene	51.9		0.200	1.00
563-58-6	1,1-Dichloropropene	52.1		0.052	1.00
87-61-6	1,2,3-Trichlorobenzene	46.4		0.079	1.00
96-18-4	1,2,3-Trichloropropane	48.5		0.065	1.00
120-82-1	1,2,4-Trichlorobenzene	49.7		0.105	1.00
95-63-6	1,2,4-Trimethylbenzene	50.8		0.084	1.00
96-12-8	1,2-Dibromo-3-chloropropane	49.2		0.194	1.00
106-93-4	1,2-Dibromoethane	46.8		0.102	1.00
95-50-1	1,2-Dichlorobenzene	47.5		0.135	1.00
107-06-2	1,2-Dichloroethane	47.8		0.116	1.00
78-87-5	1,2-Dichloropropane	48.1		0.150	1.00
108-67-8	1,3,5-Trimethylbenzene	51.7		0.066	1.00
541-73-1	1,3-Dichlorobenzene	47.3		0.138	1.00
142-28-9	1,3-Dichloropropane	47.6		0.059	1.00
106-46-7	1,4-Dichlorobenzene	49.7		0.083	1.00
594-20-7	2,2-Dichloropropane	49.2		0.170	1.00
78-93-3	2-Butanone	39.6		0.142	5.00
95-49-8	2-Chlorotoluene	49.5		0.080	1.00
591-78-6	2-Hexanone	37.2		0.122	5.00
106-43-4	4-Chlorotoluene	48.8		0.124	1.00
99-87-6	4-Isopropyltoluene	52.9		0.070	1.00
108-10-1	4-Methyl-2-pentanone	48.6		0.120	5.00
67-64-1	Acetone	23.5		0.193	5.00
71-43-2	Benzene	48.1		0.111	1.00
108-86-1	Bromobenzene	46.1		0.145	1.00
74-97-5	Bromochloromethane	47.8		0.127	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MWQ-24-ms

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV9

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220516

Lab File ID: 2141029p/j5244ms

Date Collected: 10/23/14 Time: 0932

Date Received: 10/24/14

Date Analyzed: 10/29/14 Time: 2201

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 544000

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
75-27-4	Bromodichloromethane	47.1		0.083	1.00
75-25-2	Bromoform	45.2		0.215	1.00
74-83-9	Bromomethane	53.9		0.427	1.00
75-15-0	Carbon disulfide	52.3		0.190	1.00
56-23-5	Carbon tetrachloride	48.2		0.248	1.00
108-90-7	Chlorobenzene	50.1		0.083	1.00
75-00-3	Chloroethane	54.8		0.235	1.00
67-66-3	Chloroform	49.9		0.155	1.00
74-87-3	Chloromethane	50.1		0.144	1.00
74-95-3	Dibromomethane	46.3		0.211	1.00
75-71-8	Dichlorodifluoromethane	48.6		0.145	1.00
100-41-4	Ethylbenzene	48.9		0.109	1.00
87-68-3	Hexachlorobutadiene	48.8		0.265	1.00
98-82-8	Isopropylbenzene (Cumene)	52.6		0.130	1.00
75-09-2	Methylene chloride	49.2		0.149	5.00
91-20-3	Naphthalene	44.5		0.176	1.00
100-42-5	Styrene	51.1		0.089	1.00
127-18-4	Tetrachloroethene	50.3		0.193	1.00
108-88-3	Toluene	49.4		0.122	1.00
79-01-6	Trichloroethene	48.9		0.161	1.00
75-69-4	Trichlorofluoromethane	50.2		0.157	1.00
75-01-4	Vinyl chloride	43.7		0.127	1.00
156-59-2	cis-1,2-Dichloroethene	47.5		0.103	1.00
10061-01-5	cis-1,3-Dichloropropene	47.5		0.124	1.00
136777-61-	m,p-Xylene	100		0.123	2.00
104-51-8	n-Butylbenzene	50.6		0.123	1.00
103-65-1	n-Propylbenzene	49.1		0.727	1.00
95-47-6	o-Xylene	51.6		0.055	1.00
135-98-8	sec-Butylbenzene	52.3		0.107	1.00
1634-04-4	tert-Butyl methyl ether (MTBE)	50.5		0.078	5.00
98-06-6	tert-Butylbenzene	52.1		0.087	1.00
156-60-5	trans-1,2-Dichloroethene	48.0		0.077	1.00

214102205 60

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MWQ-24-ms

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV9

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220516

Lab File ID: 2141029p/j5244ms

Date Collected: 10/23/14 Time: 0932

Date Received: 10/24/14

Date Analyzed: 10/29/14 Time: 2201

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 544000

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
10061-02-6	trans-1,3-Dichloropropene	50.1		0.128	1.00

214102205 61

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MWQ-24-sd

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV9

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220517

Lab File ID: 2141029p/j5245msd

Date Collected: 10/23/14 Time: 0932

Date Received: 10/24/14

Date Analyzed: 10/29/14 Time: 2221

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 544000

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
630-20-6	1,1,1,2-Tetrachloroethane	46.8		0.120	1.00
71-55-6	1,1,1-Trichloroethane	45.4		0.123	1.00
79-34-5	1,1,2,2-Tetrachloroethane	50.1		0.109	1.00
79-00-5	1,1,2-Trichloroethane	45.4		0.159	1.00
75-34-3	1,1-Dichloroethane	47.4		0.171	1.00
75-35-4	1,1-Dichloroethene	48.8		0.200	1.00
563-58-6	1,1-Dichloropropene	51.3		0.052	1.00
87-61-6	1,2,3-Trichlorobenzene	46.4		0.079	1.00
96-18-4	1,2,3-Trichloropropane	49.6		0.065	1.00
120-82-1	1,2,4-Trichlorobenzene	48.8		0.105	1.00
95-63-6	1,2,4-Trimethylbenzene	50.1		0.084	1.00
96-12-8	1,2-Dibromo-3-chloropropane	50.9		0.194	1.00
106-93-4	1,2-Dibromoethane	47.7		0.102	1.00
95-50-1	1,2-Dichlorobenzene	46.6		0.135	1.00
107-06-2	1,2-Dichloroethane	46.9		0.116	1.00
78-87-5	1,2-Dichloropropane	46.2		0.150	1.00
108-67-8	1,3,5-Trimethylbenzene	50.3		0.066	1.00
541-73-1	1,3-Dichlorobenzene	45.7		0.138	1.00
142-28-9	1,3-Dichloropropane	47.5		0.059	1.00
106-46-7	1,4-Dichlorobenzene	47.0		0.083	1.00
594-20-7	2,2-Dichloropropane	46.3		0.170	1.00
78-93-3	2-Butanone	41.3		0.142	5.00
95-49-8	2-Chlorotoluene	47.9		0.080	1.00
591-78-6	2-Hexanone	40.5		0.122	5.00
106-43-4	4-Chlorotoluene	47.9		0.124	1.00
99-87-6	4-Isopropyltoluene	51.2		0.070	1.00
108-10-1	4-Methyl-2-pentanone	51.5		0.120	5.00
67-64-1	Acetone	25.5		0.193	5.00
71-43-2	Benzene	46.1		0.111	1.00
108-86-1	Bromobenzene	44.2		0.145	1.00
74-97-5	Bromochloromethane	45.7		0.127	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MWQ-24-sd

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV9

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220517

Lab File ID: 2141029p/j5245msd

Date Collected: 10/23/14 Time: 0932

Date Received: 10/24/14

Date Analyzed: 10/29/14 Time: 2221

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 544000

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
75-27-4	Bromodichloromethane	46.3		0.083	1.00
75-25-2	Bromoform	46.0		0.215	1.00
74-83-9	Bromomethane	47.9		0.427	1.00
75-15-0	Carbon disulfide	48.7		0.190	1.00
56-23-5	Carbon tetrachloride	45.6		0.248	1.00
108-90-7	Chlorobenzene	48.8		0.083	1.00
75-00-3	Chloroethane	52.4		0.235	1.00
67-66-3	Chloroform	48.6		0.155	1.00
74-87-3	Chloromethane	49.0		0.144	1.00
74-95-3	Dibromomethane	47.1		0.211	1.00
75-71-8	Dichlorodifluoromethane	46.2		0.145	1.00
100-41-4	Ethylbenzene	47.6		0.109	1.00
87-68-3	Hexachlorobutadiene	47.7		0.265	1.00
98-82-8	Isopropylbenzene (Cumene)	51.7		0.130	1.00
75-09-2	Methylene chloride	48.4		0.149	5.00
91-20-3	Naphthalene	45.4		0.176	1.00
100-42-5	Styrene	50.7		0.089	1.00
127-18-4	Tetrachloroethene	48.9		0.193	1.00
108-88-3	Toluene	47.7		0.122	1.00
79-01-6	Trichloroethene	47.1		0.161	1.00
75-69-4	Trichlorofluoromethane	45.1		0.157	1.00
75-01-4	Vinyl chloride	42.2		0.127	1.00
156-59-2	cis-1,2-Dichloroethene	46.7		0.103	1.00
10061-01-5	cis-1,3-Dichloropropene	46.5		0.124	1.00
136777-61-	m,p-Xylene	97.8		0.123	2.00
104-51-8	n-Butylbenzene	49.1		0.123	1.00
103-65-1	n-Propylbenzene	47.3		0.727	1.00
95-47-6	o-Xylene	50.3		0.055	1.00
135-98-8	sec-Butylbenzene	50.6		0.107	1.00
1634-04-4	tert-Butyl methyl ether (MTBE)	50.4		0.078	5.00
98-06-6	tert-Butylbenzene	50.0		0.087	1.00
156-60-5	trans-1,2-Dichloroethene	47.4		0.077	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MWQ-24-sd

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV9

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220517

Lab File ID: 2141029p/j5245msd

Date Collected: 10/23/14 Time: 0932

Date Received: 10/24/14

Date Analyzed: 10/29/14 Time: 2221

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 544000

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
10061-02-6	trans-1,3-Dichloropropene	49.8		0.128	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MWQ-24-c

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV9

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220519

Lab File ID: 2141029p/j5251

Date Collected: 10/23/14 Time: 0932

Date Received: 10/24/14

Date Analyzed: 10/30/14 Time: 0022

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 544000

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
630-20-6	1,1,1,2-Tetrachloroethane	0.120	U	0.120	1.00
71-55-6	1,1,1-Trichloroethane	0.123	U	0.123	1.00
79-34-5	1,1,2,2-Tetrachloroethane	0.109	U	0.109	1.00
79-00-5	1,1,2-Trichloroethane	0.159	U	0.159	1.00
75-34-3	1,1-Dichloroethane	0.171	U	0.171	1.00
75-35-4	1,1-Dichloroethene	0.200	U	0.200	1.00
563-58-6	1,1-Dichloropropene	0.052	U	0.052	1.00
87-61-6	1,2,3-Trichlorobenzene	0.079	U	0.079	1.00
96-18-4	1,2,3-Trichloropropane	0.065	U	0.065	1.00
120-82-1	1,2,4-Trichlorobenzene	0.105	U	0.105	1.00
95-63-6	1,2,4-Trimethylbenzene	0.084	U	0.084	1.00
96-12-8	1,2-Dibromo-3-chloropropane	0.194	U	0.194	1.00
106-93-4	1,2-Dibromoethane	0.102	U	0.102	1.00
95-50-1	1,2-Dichlorobenzene	0.135	U	0.135	1.00
107-06-2	1,2-Dichloroethane	0.116	U	0.116	1.00
78-87-5	1,2-Dichloropropane	0.150	U	0.150	1.00
108-67-8	1,3,5-Trimethylbenzene	0.066	U	0.066	1.00
541-73-1	1,3-Dichlorobenzene	0.138	U	0.138	1.00
142-28-9	1,3-Dichloropropane	0.059	U	0.059	1.00
106-46-7	1,4-Dichlorobenzene	0.083	U	0.083	1.00
594-20-7	2,2-Dichloropropane	0.170	U	0.170	1.00
78-93-3	2-Butanone	0.142	U	0.142	5.00
95-49-8	2-Chlorotoluene	0.080	U	0.080	1.00
591-78-6	2-Hexanone	0.122	U	0.122	5.00
106-43-4	4-Chlorotoluene	0.124	U	0.124	1.00
99-87-6	4-Isopropyltoluene	0.070	U	0.070	1.00
108-10-1	4-Methyl-2-pentanone	0.120	U	0.120	5.00
67-64-1	Acetone	0.193	U	0.193	5.00
71-43-2	Benzene	0.111	U	0.111	1.00
108-86-1	Bromobenzene	0.145	U	0.145	1.00
74-97-5	Bromochloromethane	0.127	U	0.127	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MWQ-24-c

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV9

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220519

Lab File ID: 2141029p/j5251

Date Collected: 10/23/14 Time: 0932

Date Received: 10/24/14

Date Analyzed: 10/30/14 Time: 0022

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 544000

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
75-27-4	Bromodichloromethane	0.083	U	0.083	1.00
75-25-2	Bromoform	0.215	U	0.215	1.00
74-83-9	Bromomethane	0.427	U	0.427	1.00
75-15-0	Carbon disulfide	0.190	U	0.190	1.00
56-23-5	Carbon tetrachloride	0.248	U	0.248	1.00
108-90-7	Chlorobenzene	0.083	U	0.083	1.00
75-00-3	Chloroethane	0.235	U	0.235	1.00
67-66-3	Chloroform	0.155	U	0.155	1.00
74-87-3	Chloromethane	0.144	U	0.144	1.00
74-95-3	Dibromomethane	0.211	U	0.211	1.00
75-71-8	Dichlorodifluoromethane	0.145	U	0.145	1.00
100-41-4	Ethylbenzene	0.109	U	0.109	1.00
87-68-3	Hexachlorobutadiene	0.265	U	0.265	1.00
98-82-8	Isopropylbenzene (Cumene)	0.130	U	0.130	1.00
75-09-2	Methylene chloride	0.149	U	0.149	5.00
91-20-3	Naphthalene	0.176	U	0.176	1.00
100-42-5	Styrene	0.089	U	0.089	1.00
127-18-4	Tetrachloroethene	0.193	U	0.193	1.00
108-88-3	Toluene	0.122	U	0.122	1.00
79-01-6	Trichloroethene	0.161	U	0.161	1.00
75-69-4	Trichlorofluoromethane	0.157	U	0.157	1.00
75-01-4	Vinyl chloride	0.127	U	0.127	1.00
156-59-2	cis-1,2-Dichloroethene	0.103	U	0.103	1.00
10061-01-5	cis-1,3-Dichloropropene	0.124	U	0.124	1.00
136777-61-	m,p-Xylene	0.123	U	0.123	2.00
104-51-8	n-Butylbenzene	0.123	U	0.123	1.00
103-65-1	n-Propylbenzene	0.727	U	0.727	1.00
95-47-6	o-Xylene	0.055	U	0.055	1.00
135-98-8	sec-Butylbenzene	0.107	U	0.107	1.00
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078	U	0.078	5.00
98-06-6	tert-Butylbenzene	0.087	U	0.087	1.00
156-60-5	trans-1,2-Dichloroethene	0.077	U	0.077	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MWQ-24-c

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV9

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220519

Lab File ID: 2141029p/j5251

Date Collected: 10/23/14 Time: 0932

Date Received: 10/24/14

Date Analyzed: 10/30/14 Time: 0022

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 544000

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: *ug/L*

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
10061-02-6	trans-1,3-Dichloropropene	0.128	U	0.128	1.00

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MA02MW001D

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV9

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220520

Lab File ID: 2141029p/j5252

Date Collected: 10/23/14 Time: 1143

Date Received: 10/24/14

Date Analyzed: 10/30/14 Time: 0042

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 544000

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
630-20-6	1,1,1,2-Tetrachloroethane	0.120	U	0.120	1.00
71-55-6	1,1,1-Trichloroethane	0.123	U	0.123	1.00
79-34-5	1,1,2,2-Tetrachloroethane	0.109	U	0.109	1.00
79-00-5	1,1,2-Trichloroethane	0.159	U	0.159	1.00
75-34-3	1,1-Dichloroethane	0.171	U	0.171	1.00
75-35-4	1,1-Dichloroethene	0.200	U	0.200	1.00
563-58-6	1,1-Dichloropropene	0.052	U	0.052	1.00
87-61-6	1,2,3-Trichlorobenzene	0.079	U	0.079	1.00
96-18-4	1,2,3-Trichloropropane	0.065	U	0.065	1.00
120-82-1	1,2,4-Trichlorobenzene	0.105	U	0.105	1.00
95-63-6	1,2,4-Trimethylbenzene	0.084	U	0.084	1.00
96-12-8	1,2-Dibromo-3-chloropropane	0.194	U	0.194	1.00
106-93-4	1,2-Dibromoethane	0.102	U	0.102	1.00
95-50-1	1,2-Dichlorobenzene	0.135	U	0.135	1.00
107-06-2	1,2-Dichloroethane	0.116	U	0.116	1.00
78-87-5	1,2-Dichloropropane	0.150	U	0.150	1.00
108-67-8	1,3,5-Trimethylbenzene	0.066	U	0.066	1.00
541-73-1	1,3-Dichlorobenzene	0.138	U	0.138	1.00
142-28-9	1,3-Dichloropropane	0.059	U	0.059	1.00
106-46-7	1,4-Dichlorobenzene	0.083	U	0.083	1.00
594-20-7	2,2-Dichloropropane	0.170	U	0.170	1.00
78-93-3	2-Butanone	0.142	U	0.142	5.00
95-49-8	2-Chlorotoluene	0.080	U	0.080	1.00
591-78-6	2-Hexanone	0.122	U	0.122	5.00
106-43-4	4-Chlorotoluene	0.124	U	0.124	1.00
99-87-6	4-Isopropyltoluene	0.070	U	0.070	1.00
108-10-1	4-Methyl-2-pentanone	0.120	U	0.120	5.00
67-64-1	Acetone	0.193	U	0.193	5.00
71-43-2	Benzene	0.111	U	0.111	1.00
108-86-1	Bromobenzene	0.145	U	0.145	1.00
74-97-5	Bromochloromethane	0.127	U	0.127	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MA02MW001D

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV9

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220520

Lab File ID: 2141029p/j5252

Date Collected: 10/23/14 Time: 1143

Date Received: 10/24/14

Date Analyzed: 10/30/14 Time: 0042

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 544000

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
75-27-4	Bromodichloromethane	0.083	U	0.083	1.00
75-25-2	Bromoform	0.215	U	0.215	1.00
74-83-9	Bromomethane	0.427	U	0.427	1.00
75-15-0	Carbon disulfide	0.190	U	0.190	1.00
56-23-5	Carbon tetrachloride	0.248	U	0.248	1.00
108-90-7	Chlorobenzene	0.083	U	0.083	1.00
75-00-3	Chloroethane	0.235	U	0.235	1.00
67-66-3	Chloroform	0.155	U	0.155	1.00
74-87-3	Chloromethane	0.144	U	0.144	1.00
74-95-3	Dibromomethane	0.211	U	0.211	1.00
75-71-8	Dichlorodifluoromethane	0.145	U	0.145	1.00
100-41-4	Ethylbenzene	0.109	U	0.109	1.00
87-68-3	Hexachlorobutadiene	0.265	U	0.265	1.00
98-82-8	Isopropylbenzene (Cumene)	0.130	U	0.130	1.00
75-09-2	Methylene chloride	0.149	U	0.149	5.00
91-20-3	Naphthalene	0.176	U	0.176	1.00
100-42-5	Styrene	0.089	U	0.089	1.00
127-18-4	Tetrachloroethene	0.193	U	0.193	1.00
108-88-3	Toluene	0.122	U	0.122	1.00
79-01-6	Trichloroethene	0.161	U	0.161	1.00
75-69-4	Trichlorofluoromethane	0.157	U	0.157	1.00
75-01-4	Vinyl chloride	0.127	U	0.127	1.00
156-59-2	cis-1,2-Dichloroethene	0.103	U	0.103	1.00
10061-01-5	cis-1,3-Dichloropropene	0.124	U	0.124	1.00
136777-61-	m,p-Xylene	0.123	U	0.123	2.00
104-51-8	n-Butylbenzene	0.123	U	0.123	1.00
103-65-1	n-Propylbenzene	0.727	U	0.727	1.00
95-47-6	o-Xylene	0.055	U	0.055	1.00
135-98-8	sec-Butylbenzene	0.107	U	0.107	1.00
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078	U	0.078	5.00
98-06-6	tert-Butylbenzene	0.087	U	0.087	1.00
156-60-5	trans-1,2-Dichloroethene	0.077	U	0.077	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MA02MW001D

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV9

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220520

Lab File ID: 2141029p/j5252

Date Collected: 10/23/14 Time: 1143

Date Received: 10/24/14

Date Analyzed: 10/30/14 Time: 0042

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 544000

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
10061-02-6	trans-1,3-Dichloropropene	0.128	U	0.128	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MA02MW001D-c

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV8

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220521

Lab File ID: 2141030p/i1832

Date Collected: 10/23/14 Time: 1143

Date Received: 10/24/14

Date Analyzed: 10/31/14 Time: 0057

Dilution Factor: 1 Analyst: JCK

Prep Batch: Analytical Batch: 544101

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
630-20-6	1,1,1,2-Tetrachloroethane	0.120	U	0.120	1.00
71-55-6	1,1,1-Trichloroethane	0.123	U	0.123	1.00
79-34-5	1,1,2,2-Tetrachloroethane	0.109	U	0.109	1.00
79-00-5	1,1,2-Trichloroethane	0.159	U	0.159	1.00
75-34-3	1,1-Dichloroethane	0.171	U	0.171	1.00
75-35-4	1,1-Dichloroethene	0.200	U	0.200	1.00
563-58-6	1,1-Dichloropropene	0.052	U	0.052	1.00
87-61-6	1,2,3-Trichlorobenzene	0.079	U	0.079	1.00
96-18-4	1,2,3-Trichloropropane	0.065	U	0.065	1.00
120-82-1	1,2,4-Trichlorobenzene	0.105	U	0.105	1.00
95-63-6	1,2,4-Trimethylbenzene	0.084	U	0.084	1.00
96-12-8	1,2-Dibromo-3-chloropropane	0.194	U	0.194	1.00
106-93-4	1,2-Dibromoethane	0.102	U	0.102	1.00
95-50-1	1,2-Dichlorobenzene	0.135	U	0.135	1.00
107-06-2	1,2-Dichloroethane	0.116	U	0.116	1.00
78-87-5	1,2-Dichloropropane	0.150	U	0.150	1.00
108-67-8	1,3,5-Trimethylbenzene	0.066	U	0.066	1.00
541-73-1	1,3-Dichlorobenzene	0.138	U	0.138	1.00
142-28-9	1,3-Dichloropropane	0.059	U	0.059	1.00
106-46-7	1,4-Dichlorobenzene	0.083	U	0.083	1.00
594-20-7	2,2-Dichloropropane	0.170	U	0.170	1.00
78-93-3	2-Butanone	0.142	U	0.142	5.00
95-49-8	2-Chlorotoluene	0.080	U	0.080	1.00
591-78-6	2-Hexanone	0.122	U	0.122	5.00
106-43-4	4-Chlorotoluene	0.124	U	0.124	1.00
99-87-6	4-Isopropyltoluene	0.070	U	0.070	1.00
108-10-1	4-Methyl-2-pentanone	0.120	U	0.120	5.00
67-64-1	Acetone	0.193	UQ	0.193	5.00
71-43-2	Benzene	0.111	U	0.111	1.00
108-86-1	Bromobenzene	0.145	U	0.145	1.00
74-97-5	Bromochloromethane	0.127	U	0.127	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MA02MW001D-c

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV8

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220521

Lab File ID: 2141030p/i1832

Date Collected: 10/23/14 Time: 1143

Date Received: 10/24/14

Date Analyzed: 10/31/14 Time: 0057

Dilution Factor: 1 Analyst: JCK

Prep Batch: Analytical Batch: 544101

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
75-27-4	Bromodichloromethane	0.083	U	0.083	1.00
75-25-2	Bromoform	0.215	U	0.215	1.00
74-83-9	Bromomethane	0.427	U	0.427	1.00
75-15-0	Carbon disulfide	0.190	U	0.190	1.00
56-23-5	Carbon tetrachloride	0.248	U	0.248	1.00
108-90-7	Chlorobenzene	0.083	U	0.083	1.00
75-00-3	Chloroethane	0.235	U	0.235	1.00
67-66-3	Chloroform	0.155	U	0.155	1.00
74-87-3	Chloromethane	0.144	U	0.144	1.00
74-95-3	Dibromomethane	0.211	U	0.211	1.00
75-71-8	Dichlorodifluoromethane	0.145	U	0.145	1.00
100-41-4	Ethylbenzene	0.109	U	0.109	1.00
87-68-3	Hexachlorobutadiene	0.265	U	0.265	1.00
98-82-8	Isopropylbenzene (Cumene)	0.130	U	0.130	1.00
75-09-2	Methylene chloride	0.149	U	0.149	5.00
91-20-3	Naphthalene	0.176	U	0.176	1.00
100-42-5	Styrene	0.089	U	0.089	1.00
127-18-4	Tetrachloroethene	0.193	U	0.193	1.00
108-88-3	Toluene	0.122	U	0.122	1.00
79-01-6	Trichloroethene	0.161	U	0.161	1.00
75-69-4	Trichlorofluoromethane	0.157	U	0.157	1.00
75-01-4	Vinyl chloride	0.127	U	0.127	1.00
156-59-2	cis-1,2-Dichloroethene	0.103	U	0.103	1.00
10061-01-5	cis-1,3-Dichloropropene	0.124	U	0.124	1.00
136777-61-	m,p-Xylene	0.123	U	0.123	2.00
104-51-8	n-Butylbenzene	0.123	U	0.123	1.00
103-65-1	n-Propylbenzene	0.727	U	0.727	1.00
95-47-6	o-Xylene	0.055	U	0.055	1.00
135-98-8	sec-Butylbenzene	0.107	U	0.107	1.00
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078	U	0.078	5.00
98-06-6	tert-Butylbenzene	0.087	U	0.087	1.00
156-60-5	trans-1,2-Dichloroethene	0.077	U	0.077	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MA02MW001D-c

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV8

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 21410220521

Lab File ID: 2141030p/i1832

Date Collected: 10/23/14 Time: 1143

Date Received: 10/24/14

Date Analyzed: 10/31/14 Time: 0057

Dilution Factor: 1 Analyst: JCK

Prep Batch: Analytical Batch: 544101

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
10061-02-6	trans-1,3-Dichloropropene	0.128	U	0.128	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MB1373754

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV12

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 1373754

Lab File ID: 2141024/I7908

Date Collected: Time:

Date Received:

Date Analyzed: 10/24/14 Time: 1738

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 543720

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
67-64-1	Acetone	0.193	U	0.193	5.00
74-97-5	Bromochloromethane	0.127	U	0.127	1.00
75-27-4	Bromodichloromethane	0.083	U	0.083	1.00
75-25-2	Bromoform	0.215	U	0.215	1.00
74-83-9	Bromomethane	0.427	U	0.427	1.00
75-15-0	Carbon disulfide	0.190	U	0.190	1.00
56-23-5	Carbon tetrachloride	0.248	U	0.248	1.00
75-00-3	Chloroethane	0.235	U	0.235	1.00
136777-61-	m,p-Xylene	0.123	U	0.123	2.00
67-66-3	Chloroform	0.155	U	0.155	1.00
74-87-3	Chloromethane	0.144	U	0.144	1.00
74-95-3	Dibromomethane	0.211	U	0.211	1.00
75-71-8	Dichlorodifluoromethane	0.145	U	0.145	1.00
75-34-3	1,1-Dichloroethane	0.171	U	0.171	1.00
107-06-2	1,2-Dichloroethane	0.116	U	0.116	1.00
156-59-2	cis-1,2-Dichloroethene	0.103	U	0.103	1.00
156-60-5	trans-1,2-Dichloroethene	0.077	U	0.077	1.00
75-09-2	Methylene chloride	0.149	U	0.149	5.00
78-87-5	1,2-Dichloropropane	0.150	U	0.150	1.00
10061-01-5	cis-1,3-Dichloropropene	0.124	U	0.124	1.00
10061-02-6	trans-1,3-Dichloropropene	0.128	U	0.128	1.00
100-41-4	Ethylbenzene	0.109	U	0.109	1.00
591-78-6	2-Hexanone	0.122	U	0.122	5.00
98-82-8	Isopropylbenzene (Cumene)	0.130	U	0.130	1.00
78-93-3	2-Butanone	0.142	U	0.142	5.00
108-10-1	4-Methyl-2-pentanone	0.120	U	0.120	5.00
103-65-1	n-Propylbenzene	0.727	U	0.727	1.00
100-42-5	Styrene	0.089	U	0.089	1.00
127-18-4	Tetrachloroethene	0.193	U	0.193	1.00
630-20-6	1,1,1,2-Tetrachloroethane	0.120	U	0.120	1.00
79-34-5	1,1,2,2-Tetrachloroethane	0.109	U	0.109	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MB1373754

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV12

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 1373754

Lab File ID: 2141024/I7908

Date Collected: Time:

Date Received:

Date Analyzed: 10/24/14 Time: 1738

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 543720

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
120-82-1	1,2,4-Trichlorobenzene	0.105	U	0.105	1.00
71-55-6	1,1,1-Trichloroethane	0.123	U	0.123	1.00
79-00-5	1,1,2-Trichloroethane	0.159	U	0.159	1.00
75-69-4	Trichlorofluoromethane	0.157	U	0.157	1.00
96-18-4	1,2,3-Trichloropropane	0.065	U	0.065	1.00
95-63-6	1,2,4-Trimethylbenzene	0.084	U	0.084	1.00
108-67-8	1,3,5-Trimethylbenzene	0.066	U	0.066	1.00
75-01-4	Vinyl chloride	0.127	U	0.127	1.00
95-47-6	o-Xylene	0.055	U	0.055	1.00
96-12-8	1,2-Dibromo-3-chloropropane	0.194	U	0.194	1.00
106-93-4	1,2-Dibromoethane	0.102	U	0.102	1.00
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078	U	0.078	5.00
99-87-6	4-Isopropyltoluene	0.070	U	0.070	1.00
594-20-7	2,2-Dichloropropane	0.170	U	0.170	1.00
563-58-6	1,1-Dichloropropene	0.052	U	0.052	1.00
142-28-9	1,3-Dichloropropane	0.059	U	0.059	1.00
108-86-1	Bromobenzene	0.145	U	0.145	1.00
95-49-8	2-Chlorotoluene	0.080	U	0.080	1.00
106-43-4	4-Chlorotoluene	0.124	U	0.124	1.00
98-06-6	tert-Butylbenzene	0.087	U	0.087	1.00
135-98-8	sec-Butylbenzene	0.107	U	0.107	1.00
541-73-1	1,3-Dichlorobenzene	0.138	U	0.138	1.00
106-46-7	1,4-Dichlorobenzene	0.083	U	0.083	1.00
104-51-8	n-Butylbenzene	0.123	U	0.123	1.00
95-50-1	1,2-Dichlorobenzene	0.135	U	0.135	1.00
87-68-3	Hexachlorobutadiene	0.265	U	0.265	1.00
91-20-3	Naphthalene	0.176	U	0.176	1.00
87-61-6	1,2,3-Trichlorobenzene	0.079	U	0.079	1.00
75-35-4	1,1-Dichloroethene	0.200	U	0.200	1.00
71-43-2	Benzene	0.111	U	0.111	1.00
79-01-6	Trichloroethene	0.161	U	0.161	1.00
108-88-3	Toluene	0.122	U	0.122	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MB1373754

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV12

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 1373754

Lab File ID: 2141024/I7908

Date Collected: Time:

Date Received:

Date Analyzed: 10/24/14 Time: 1738

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 543720

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
108-90-7	Chlorobenzene	0.083	U	0.083	1.00

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MB1375109

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV9

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 1375109

Lab File ID: 2141029p/j5242

Date Collected: Time:

Date Received:

Date Analyzed: 10/29/14 Time: 2121

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 544000

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
67-64-1	Acetone	0.193	U	0.193	5.00
74-97-5	Bromochloromethane	0.127	U	0.127	1.00
75-27-4	Bromodichloromethane	0.083	U	0.083	1.00
75-25-2	Bromoform	0.215	U	0.215	1.00
74-83-9	Bromomethane	0.427	U	0.427	1.00
75-15-0	Carbon disulfide	0.190	U	0.190	1.00
56-23-5	Carbon tetrachloride	0.248	U	0.248	1.00
75-00-3	Chloroethane	0.235	U	0.235	1.00
136777-61-	m,p-Xylene	0.123	U	0.123	2.00
67-66-3	Chloroform	0.155	U	0.155	1.00
74-87-3	Chloromethane	0.144	U	0.144	1.00
74-95-3	Dibromomethane	0.211	U	0.211	1.00
75-71-8	Dichlorodifluoromethane	0.145	U	0.145	1.00
75-34-3	1,1-Dichloroethane	0.171	U	0.171	1.00
107-06-2	1,2-Dichloroethane	0.116	U	0.116	1.00
156-59-2	cis-1,2-Dichloroethene	0.103	U	0.103	1.00
156-60-5	trans-1,2-Dichloroethene	0.077	U	0.077	1.00
75-09-2	Methylene chloride	0.149	U	0.149	5.00
78-87-5	1,2-Dichloropropane	0.150	U	0.150	1.00
10061-01-5	cis-1,3-Dichloropropene	0.124	U	0.124	1.00
10061-02-6	trans-1,3-Dichloropropene	0.128	U	0.128	1.00
100-41-4	Ethylbenzene	0.109	U	0.109	1.00
591-78-6	2-Hexanone	0.122	U	0.122	5.00
98-82-8	Isopropylbenzene (Cumene)	0.130	U	0.130	1.00
78-93-3	2-Butanone	0.142	U	0.142	5.00
108-10-1	4-Methyl-2-pentanone	0.120	U	0.120	5.00
103-65-1	n-Propylbenzene	0.727	U	0.727	1.00
100-42-5	Styrene	0.089	U	0.089	1.00
127-18-4	Tetrachloroethene	0.193	U	0.193	1.00
630-20-6	1,1,1,2-Tetrachloroethane	0.120	U	0.120	1.00
79-34-5	1,1,2,2-Tetrachloroethane	0.109	U	0.109	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MB1375109

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV9

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 1375109

Lab File ID: 2141029p/j5242

Date Collected: Time:

Date Received:

Date Analyzed: 10/29/14 Time: 2121

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 544000

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
120-82-1	1,2,4-Trichlorobenzene	0.105	U	0.105	1.00
71-55-6	1,1,1-Trichloroethane	0.123	U	0.123	1.00
79-00-5	1,1,2-Trichloroethane	0.159	U	0.159	1.00
75-69-4	Trichlorofluoromethane	0.157	U	0.157	1.00
96-18-4	1,2,3-Trichloropropane	0.065	U	0.065	1.00
95-63-6	1,2,4-Trimethylbenzene	0.084	U	0.084	1.00
108-67-8	1,3,5-Trimethylbenzene	0.066	U	0.066	1.00
75-01-4	Vinyl chloride	0.127	U	0.127	1.00
95-47-6	o-Xylene	0.055	U	0.055	1.00
96-12-8	1,2-Dibromo-3-chloropropane	0.194	U	0.194	1.00
106-93-4	1,2-Dibromoethane	0.102	U	0.102	1.00
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078	U	0.078	5.00
99-87-6	4-Isopropyltoluene	0.070	U	0.070	1.00
594-20-7	2,2-Dichloropropane	0.170	U	0.170	1.00
563-58-6	1,1-Dichloropropene	0.052	U	0.052	1.00
142-28-9	1,3-Dichloropropane	0.059	U	0.059	1.00
108-86-1	Bromobenzene	0.145	U	0.145	1.00
95-49-8	2-Chlorotoluene	0.080	U	0.080	1.00
106-43-4	4-Chlorotoluene	0.124	U	0.124	1.00
98-06-6	tert-Butylbenzene	0.087	U	0.087	1.00
135-98-8	sec-Butylbenzene	0.107	U	0.107	1.00
541-73-1	1,3-Dichlorobenzene	0.138	U	0.138	1.00
106-46-7	1,4-Dichlorobenzene	0.083	U	0.083	1.00
104-51-8	n-Butylbenzene	0.123	U	0.123	1.00
95-50-1	1,2-Dichlorobenzene	0.135	U	0.135	1.00
87-68-3	Hexachlorobutadiene	0.265	U	0.265	1.00
91-20-3	Naphthalene	0.176	U	0.176	1.00
87-61-6	1,2,3-Trichlorobenzene	0.079	U	0.079	1.00
75-35-4	1,1-Dichloroethene	0.200	U	0.200	1.00
71-43-2	Benzene	0.111	U	0.111	1.00
79-01-6	Trichloroethene	0.161	U	0.161	1.00
108-88-3	Toluene	0.122	U	0.122	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MB1375109

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV9

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 1375109

Lab File ID: 2141029p/j5242

Date Collected: Time:

Date Received:

Date Analyzed: 10/29/14 Time: 2121

Dilution Factor: 1 Analyst: CLH

Prep Batch: Analytical Batch: 544000

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
108-90-7	Chlorobenzene	0.083	U	0.083	1.00

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MB1375611

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL Lab Sample ID: 1375611

Level: (low/med) Lab File ID: 2141030p/i1827

% Moisture: not dec. Date Collected: Time:

GC Column: RTX-VMS-30 ID: .25 (mm) Date Received:

Instrument ID: MSV8 Date Analyzed: 10/30/14 Time: 2321

Soil Extract Volume: (µL) Dilution Factor: 1 Analyst: JCK

Soil Aliquot Volume: (µL) Prep Batch: Analytical Batch: 544101

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
67-64-1	Acetone	0.193	U	0.193	5.00
74-97-5	Bromochloromethane	0.127	U	0.127	1.00
75-27-4	Bromodichloromethane	0.083	U	0.083	1.00
75-25-2	Bromoform	0.215	U	0.215	1.00
74-83-9	Bromomethane	0.427	U	0.427	1.00
75-15-0	Carbon disulfide	0.190	U	0.190	1.00
56-23-5	Carbon tetrachloride	0.248	U	0.248	1.00
75-00-3	Chloroethane	0.235	U	0.235	1.00
136777-61-	m,p-Xylene	0.123	U	0.123	2.00
67-66-3	Chloroform	0.155	U	0.155	1.00
74-87-3	Chloromethane	0.144	U	0.144	1.00
74-95-3	Dibromomethane	0.211	U	0.211	1.00
75-71-8	Dichlorodifluoromethane	0.145	U	0.145	1.00
75-34-3	1,1-Dichloroethane	0.171	U	0.171	1.00
107-06-2	1,2-Dichloroethane	0.116	U	0.116	1.00
156-59-2	cis-1,2-Dichloroethene	0.103	U	0.103	1.00
156-60-5	trans-1,2-Dichloroethene	0.077	U	0.077	1.00
75-09-2	Methylene chloride	0.149	U	0.149	5.00
78-87-5	1,2-Dichloropropane	0.150	U	0.150	1.00
10061-01-5	cis-1,3-Dichloropropene	0.124	U	0.124	1.00
10061-02-6	trans-1,3-Dichloropropene	0.128	U	0.128	1.00
100-41-4	Ethylbenzene	0.109	U	0.109	1.00
591-78-6	2-Hexanone	0.122	U	0.122	5.00
98-82-8	Isopropylbenzene (Cumene)	0.130	U	0.130	1.00
78-93-3	2-Butanone	0.142	U	0.142	5.00
108-10-1	4-Methyl-2-pentanone	0.120	U	0.120	5.00
103-65-1	n-Propylbenzene	0.727	U	0.727	1.00
100-42-5	Styrene	0.089	U	0.089	1.00
127-18-4	Tetrachloroethene	0.193	U	0.193	1.00
630-20-6	1,1,1,2-Tetrachloroethane	0.120	U	0.120	1.00
79-34-5	1,1,2,2-Tetrachloroethane	0.109	U	0.109	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MB1375611

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV8

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 1375611

Lab File ID: 2141030p/i1827

Date Collected: Time:

Date Received:

Date Analyzed: 10/30/14 Time: 2321

Dilution Factor: 1 Analyst: JCK

Prep Batch: Analytical Batch: 544101

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
120-82-1	1,2,4-Trichlorobenzene	0.105	U	0.105	1.00
71-55-6	1,1,1-Trichloroethane	0.123	U	0.123	1.00
79-00-5	1,1,2-Trichloroethane	0.159	U	0.159	1.00
75-69-4	Trichlorofluoromethane	0.157	U	0.157	1.00
96-18-4	1,2,3-Trichloropropane	0.065	U	0.065	1.00
95-63-6	1,2,4-Trimethylbenzene	0.084	U	0.084	1.00
108-67-8	1,3,5-Trimethylbenzene	0.066	U	0.066	1.00
75-01-4	Vinyl chloride	0.127	U	0.127	1.00
95-47-6	o-Xylene	0.055	U	0.055	1.00
96-12-8	1,2-Dibromo-3-chloropropane	0.194	U	0.194	1.00
106-93-4	1,2-Dibromoethane	0.102	U	0.102	1.00
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078	U	0.078	5.00
99-87-6	4-Isopropyltoluene	0.070	U	0.070	1.00
594-20-7	2,2-Dichloropropane	0.170	U	0.170	1.00
563-58-6	1,1-Dichloropropene	0.052	U	0.052	1.00
142-28-9	1,3-Dichloropropane	0.059	U	0.059	1.00
108-86-1	Bromobenzene	0.145	U	0.145	1.00
95-49-8	2-Chlorotoluene	0.080	U	0.080	1.00
106-43-4	4-Chlorotoluene	0.124	U	0.124	1.00
98-06-6	tert-Butylbenzene	0.087	U	0.087	1.00
135-98-8	sec-Butylbenzene	0.107	U	0.107	1.00
541-73-1	1,3-Dichlorobenzene	0.138	U	0.138	1.00
106-46-7	1,4-Dichlorobenzene	0.083	U	0.083	1.00
104-51-8	n-Butylbenzene	0.123	U	0.123	1.00
95-50-1	1,2-Dichlorobenzene	0.135	U	0.135	1.00
87-68-3	Hexachlorobutadiene	0.265	U	0.265	1.00
91-20-3	Naphthalene	0.176	U	0.176	1.00
87-61-6	1,2,3-Trichlorobenzene	0.079	U	0.079	1.00
75-35-4	1,1-Dichloroethene	0.200	U	0.200	1.00
71-43-2	Benzene	0.111	U	0.111	1.00
79-01-6	Trichloroethene	0.161	U	0.161	1.00
108-88-3	Toluene	0.122	U	0.122	1.00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MB1375611

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Level: (low/med)

% Moisture: not dec.

GC Column: RTX-VMS-30 ID: .25 (mm)

Instrument ID: MSV8

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Lab Sample ID: 1375611

Lab File ID: 2141030p/i1827

Date Collected: Time:

Date Received:

Date Analyzed: 10/30/14 Time: 2321

Dilution Factor: 1 Analyst: JCK

Prep Batch: Analytical Batch: 544101

Analytical Method: SW-846 8260B

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
108-90-7	Chlorobenzene	0.083	U	0.083	1.00

214102205 92

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Method: SW-846 8260B

	SAMPLE NO.	SMC1	#	SMC2	#	SMC3	#	SMC4	#	TOT OUT
1.	MA01MW002	100		100		108		98		0
2.	M114MW002-c	97		101		106		100		0
3.	M114MW003	98		103		101		104		0
4.	M114MW004	98		104		101		106		0
5.	M114MW004-c	98		108		103		111		0
6.	M114MW001	100		109		101		112		0
7.	MWQ-24	99		106		103		105		0
8.	MWQ-24-ms	99		100		97		99		0
9.	MWQ-24-sd	101		99		98		101		0
10.	MWQ-24-c	101		103		103		105		0
11.	MA02MW001D	98		99		104		107		0
12.	MA01MW002-c	99		99		107		98		0
13.	MA02MW001D-c	93		95		101		106		0
14.	LCS1373755	102		100		99		100		0
15.	LCS1375110	101		99		100		99		0
16.	LCS1375612	95		96		99		104		0
17.	LCSD1373756	103		99		98		101		0
18.	LCSD1375111	100		98		99		95		0
19.	LCSD1375613	94		98		98		104		0
20.	MB1373754	98		100		106		97		0
21.	MB1375109	100		106		102		105		0
22.	MB1375611	94		95		99		107		0
23.	MA01MW001	101		100		110		97		0
24.	MA01MW004	99		102		108		99		0
25.	MA01MW004-a	99		100		107		100		0
26.	MA01MW004-c	99		101		107		99		0
27.	MA01MW003	99		99		108		101		0
28.	MA01MW003-c	100		101		108		98		0
29.	M114MW002	96		100		106		99		0

		QC LIMITS
SMC 1	4-Bromofluorobenzene	75 - 120
SMC 2	Dibromofluoromethane	85 - 115
SMC 3	Toluene-d8	85 - 120
SMC 4	1,2-Dichloroethane-d4	70 - 120

Column to be used to flag recovery values

* Values outside of contract required QC limits

3A

WATER VOLATILE LCS/LCSD RECOVERY

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Analytical Batch: 543720

SAMPLE NO. : 1373755

COMPOUND	*UNITS*	*SPIKE ADDED*	*SAMPLE CONCENTRATION*	*LCS CONCENTRATION*	*LCS % REC*	*#*	*QC. LIMITS*
1,1,1,2-Tetrachloroethane	ug/L	50	0	44.7	89		80 - 130
1,1,1-Trichloroethane	ug/L	50	0	43.3	87		65 - 130
1,1,2,2-Tetrachloroethane	ug/L	50	0	48.2	96		65 - 130
1,1,2-Trichloroethane	ug/L	50	0	46.7	93		75 - 125
1,1-Dichloroethane	ug/L	50	0	44.7	89		70 - 135
1,1-Dichloroethene	ug/L	50	0	44.2	88		70 - 130
1,1-Dichloropropene	ug/L	50	0	45.2	90		75 - 130
1,2,3-Trichlorobenzene	ug/L	50	0	51.8	104		55 - 140
1,2,3-Trichloropropane	ug/L	50	0	48.3	97		75 - 125
1,2,4-Trichlorobenzene	ug/L	50	0	48.4	97		65 - 135
1,2,4-Trimethylbenzene	ug/L	50	0	47.4	95		75 - 130
1,2-Dibromo-3-chloropropane	ug/L	50	0	55.9	112		50 - 130
1,2-Dibromoethane	ug/L	50	0	48.3	97		80 - 120
1,2-Dichlorobenzene	ug/L	50	0	47.5	95		70 - 120
1,2-Dichloroethane	ug/L	50	0	45.9	92		70 - 130
1,2-Dichloropropane	ug/L	50	0	45	90		75 - 125
1,3,5-Trimethylbenzene	ug/L	50	0	47.1	94		75 - 130
1,3-Dichlorobenzene	ug/L	50	0	49	98		75 - 125
1,3-Dichloropropane	ug/L	50	0	48	96		75 - 125
1,4-Dichlorobenzene	ug/L	50	0	45	90		75 - 125
2,2-Dichloropropane	ug/L	50	0	43.8	88		70 - 135
2-Butanone	ug/L	50	0	49.4	99		30 - 150
2-Chlorotoluene	ug/L	50	0	45.9	92		75 - 125
2-Hexanone	ug/L	50	0	52.5	105		55 - 130
4-Chlorotoluene	ug/L	50	0	46.9	94		75 - 130
4-Isopropyltoluene	ug/L	50	0	48.2	96		75 - 130
4-Methyl-2-pentanone	ug/L	50	0	51.8	104		60 - 135
Acetone	ug/L	50	0	48.6	97		40 - 140
Benzene	ug/L	50	0	44.8	90		80 - 120
Bromobenzene	ug/L	50	0	46.4	93		75 - 125
Bromochloromethane	ug/L	50	0	47.5	95		65 - 130
Bromodichloromethane	ug/L	50	0	45.4	91		75 - 120
Bromoform	ug/L	50	0	47.7	95		70 - 130
Bromomethane	ug/L	50	0	47.9	96		30 - 145
Carbon disulfide	ug/L	50	0	45.8	92		35 - 160

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD : 0 out of 64 outside limits

Spike Recovery: 0 out of 128 outside limits

214102205 84

3A

WATER VOLATILE LCS/LCSD RECOVERY

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Analytical Batch: 543720

Carbon tetrachloride	ug/L	50	0	44.4	89		65 - 140
Chlorobenzene	ug/L	50	0	44.5	89		80 - 120
Chloroethane	ug/L	50	0	41.6	83		60 - 135
Chloroform	ug/L	50	0	42.5	85		65 - 135
Chloromethane	ug/L	50	0	46.4	93		40 - 125
Dibromomethane	ug/L	50	0	47.2	94		75 - 125
Dichlorodifluoromethane	ug/L	50	0	45.6	91		30 - 155
Ethylbenzene	ug/L	50	0	44.4	89		75 - 125
Hexachlorobutadiene	ug/L	50	0	48.1	96		50 - 140
Isopropylbenzene (Cumene)	ug/L	50	0	48.7	97		75 - 125
Methylene chloride	ug/L	50	0	47.3	95		55 - 140
Naphthalene	ug/L	50	0	47.2	94		55 - 140
Styrene	ug/L	50	0	49.8	100		65 - 135
Tetrachloroethene	ug/L	50	0	44.7	89		45 - 150
Toluene	ug/L	50	0	46.1	92		75 - 120
Trichloroethene	ug/L	50	0	46.4	93		70 - 125
Trichlorofluoromethane	ug/L	50	0	46	92		60 - 145
Vinyl chloride	ug/L	50	0	45	90		50 - 145
cis-1,2-Dichloroethene	ug/L	50	0	42.9	86		70 - 125
cis-1,3-Dichloropropene	ug/L	50	0	43.7	87		70 - 130
m,p-Xylene	ug/L	100	0	92.3	92		75 - 130
n-Butylbenzene	ug/L	50	0	47.3	95		70 - 135
n-Propylbenzene	ug/L	50	0	45.9	92		70 - 130
o-Xylene	ug/L	50	0	48.3	97		80 - 120
sec-Butylbenzene	ug/L	50	0	47.7	95		70 - 125
tert-Butyl methyl ether (MTBE)	ug/L	50	0	47	94		65 - 125
tert-Butylbenzene	ug/L	50	0	48.2	96		70 - 130
trans-1,2-Dichloroethene	ug/L	50	0	45.8	92		60 - 140
trans-1,3-Dichloropropene	ug/L	50	0	44.9	90		55 - 140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD : 0 out of 64 outside limits

Spike Recovery: 0 out of 128 outside limits

3A

WATER VOLATILE LCS/LCSD RECOVERY

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Analytical Batch: 543720

SAMPLE NO. : 1373756

COMPOUND	*UNITS*	*SPIKE ADDED*	*LCSD CONC.*	*LCSD % REC*	#	*% RPD*	#	*QC. LIMITS REC*	*RPD*
1,1,1,2-Tetrachloroethane	ug/L	50	45.4	91		2		80 - 130	0 - 30
1,1,1-Trichloroethane	ug/L	50	43.1	86		.5		65 - 130	0 - 30
1,1,2,2-Tetrachloroethane	ug/L	50	49.7	99		3		65 - 130	0 - 30
1,1,2-Trichloroethane	ug/L	50	47.5	95		2		75 - 125	0 - 30
1,1-Dichloroethane	ug/L	50	45.2	90		1		70 - 135	0 - 30
1,1-Dichloroethene	ug/L	50	43.1	86		3		70 - 130	0 - 30
1,1-Dichloropropene	ug/L	50	44.5	89		2		75 - 130	0 - 30
1,2,3-Trichlorobenzene	ug/L	50	53.7	107		4		55 - 140	0 - 30
1,2,3-Trichloropropane	ug/L	50	49.9	100		3		75 - 125	0 - 30
1,2,4-Trichlorobenzene	ug/L	50	48.4	97		0		65 - 135	0 - 30
1,2,4-Trimethylbenzene	ug/L	50	47.6	95		.4		75 - 130	0 - 30
1,2-Dibromo-3-chloropropane	ug/L	50	52.9	106		6		50 - 130	0 - 30
1,2-Dibromoethane	ug/L	50	50.7	101		5		80 - 120	0 - 30
1,2-Dichlorobenzene	ug/L	50	47.9	96		.8		70 - 120	0 - 30
1,2-Dichloroethane	ug/L	50	46.7	93		2		70 - 130	0 - 30
1,2-Dichloropropane	ug/L	50	46.1	92		2		75 - 125	0 - 30
1,3,5-Trimethylbenzene	ug/L	50	47.5	95		.8		75 - 130	0 - 30
1,3-Dichlorobenzene	ug/L	50	49.1	98		.2		75 - 125	0 - 30
1,3-Dichloropropane	ug/L	50	49.9	100		4		75 - 125	0 - 30
1,4-Dichlorobenzene	ug/L	50	45	90		0		75 - 125	0 - 30
2,2-Dichloropropane	ug/L	50	42.4	85		3		70 - 135	0 - 30
2-Butanone	ug/L	50	50.5	101		2		30 - 150	0 - 30
2-Chlorotoluene	ug/L	50	46.5	93		1		75 - 125	0 - 30
2-Hexanone	ug/L	50	53.1	106		1		55 - 130	0 - 30
4-Chlorotoluene	ug/L	50	46.9	94		0		75 - 130	0 - 30
4-Isopropyltoluene	ug/L	50	47.1	94		2		75 - 130	0 - 30
4-Methyl-2-pentanone	ug/L	50	53	106		2		60 - 135	0 - 30
Acetone	ug/L	50	48.5	97		.2		40 - 140	0 - 30
Benzene	ug/L	50	44.8	90		0		80 - 120	0 - 30
Bromobenzene	ug/L	50	46.3	93		.2		75 - 125	0 - 30
Bromochloromethane	ug/L	50	47.2	94		.6		65 - 130	0 - 30
Bromodichloromethane	ug/L	50	46.4	93		2		75 - 120	0 - 30
Bromoform	ug/L	50	50.1	100		5		70 - 130	0 - 30
Bromomethane	ug/L	50	50.1	100		4		30 - 145	0 - 30
Carbon disulfide	ug/L	50	44	88		4		35 - 160	0 - 30

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD : 0 out of 64 outside limits

Spike Recovery: 0 out of 128 outside limits

3A

WATER VOLATILE LCS/LCSD RECOVERY

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Analytical Batch: 543720

Carbon tetrachloride	ug/L	50	43.7	87		2		65 - 140	0 - 30
Chlorobenzene	ug/L	50	45.1	90		1		80 - 120	0 - 30
Chloroethane	ug/L	50	47.7	95		14		60 - 135	0 - 30
Chloroform	ug/L	50	42.8	86		.7		65 - 135	0 - 30
Chloromethane	ug/L	50	45.3	91		2		40 - 125	0 - 30
Dibromomethane	ug/L	50	48.5	97		3		75 - 125	0 - 30
Dichlorodifluoromethane	ug/L	50	45	90		1		30 - 155	0 - 30
Ethylbenzene	ug/L	50	44.8	90		.9		75 - 125	0 - 30
Hexachlorobutadiene	ug/L	50	47.3	95		2		50 - 140	0 - 30
Isopropylbenzene (Cumene)	ug/L	50	48.6	97		.2		75 - 125	0 - 30
Methylene chloride	ug/L	50	46.9	94		.8		55 - 140	0 - 30
Naphthalene	ug/L	50	48.9	98		4		55 - 140	0 - 30
Styrene	ug/L	50	50.5	101		1		65 - 135	0 - 30
Tetrachloroethene	ug/L	50	43.8	88		2		45 - 150	0 - 30
Toluene	ug/L	50	46.2	92		.2		75 - 120	0 - 30
Trichloroethene	ug/L	50	46.5	93		.2		70 - 125	0 - 30
Trichlorofluoromethane	ug/L	50	44.4	89		4		60 - 145	0 - 30
Vinyl chloride	ug/L	50	43.3	87		4		50 - 145	0 - 30
cis-1,2-Dichloroethene	ug/L	50	43.5	87		1		70 - 125	0 - 30
cis-1,3-Dichloropropene	ug/L	50	44.1	88		.9		70 - 130	0 - 30
m,p-Xylene	ug/L	100	92.3	92		0		75 - 130	0 - 30
n-Butylbenzene	ug/L	50	46	92		3		70 - 135	0 - 30
n-Propylbenzene	ug/L	50	45.4	91		1		70 - 130	0 - 30
o-Xylene	ug/L	50	48.6	97		.6		80 - 120	0 - 30
sec-Butylbenzene	ug/L	50	47	94		1		70 - 125	0 - 30
tert-Butyl methyl ether (MTBE)	ug/L	50	47.2	94		.4		65 - 125	0 - 30
tert-Butylbenzene	ug/L	50	47.5	95		1		70 - 130	0 - 30
trans-1,2-Dichloroethene	ug/L	50	44.6	89		3		60 - 140	0 - 30
trans-1,3-Dichloropropene	ug/L	50	46.3	93		3		55 - 140	0 - 30

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD : 0 out of 64 outside limits

Spike Recovery: 0 out of 128 outside limits

3A

WATER VOLATILE MS/MSD RECOVERY

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix Spike - EPA Sample No: MWQ-24

Analytical Batch: 544000

SAMPLE NO. : 21410220516

COMPOUND	*UNITS*	*SPIKE ADDED*	*SAMPLE CONCENTRATION*	*MS CONCENTRATION*	*MS % REC*	*#*	*QC. LIMITS*
1,1,1,2-Tetrachloroethane	ug/L	50	0	47.1	94		80 - 130
1,1,1-Trichloroethane	ug/L	50	0	47.7	95		65 - 130
1,1,2,2-Tetrachloroethane	ug/L	50	0	49.4	99		65 - 130
1,1,2-Trichloroethane	ug/L	50	0	45.9	92		75 - 125
1,1-Dichloroethane	ug/L	50	0	48.8	98		70 - 135
1,1-Dichloroethene	ug/L	50	0	51.9	104		70 - 130
1,1-Dichloropropene	ug/L	50	0	52.1	104		75 - 130
1,2,3-Trichlorobenzene	ug/L	50	0	46.4	93		55 - 140
1,2,3-Trichloropropane	ug/L	50	0	48.5	97		75 - 125
1,2,4-Trichlorobenzene	ug/L	50	0	49.7	99		65 - 135
1,2,4-Trimethylbenzene	ug/L	50	0	50.8	102		75 - 130
1,2-Dibromo-3-chloropropane	ug/L	50	0	49.2	98		50 - 130
1,2-Dibromoethane	ug/L	50	0	46.8	94		80 - 120
1,2-Dichlorobenzene	ug/L	50	0	47.5	95		70 - 120
1,2-Dichloroethane	ug/L	50	0	47.8	96		70 - 130
1,2-Dichloropropane	ug/L	50	0	48.1	96		75 - 125
1,3,5-Trimethylbenzene	ug/L	50	0	51.7	103		75 - 130
1,3-Dichlorobenzene	ug/L	50	0	47.3	95		75 - 125
1,3-Dichloropropane	ug/L	50	0	47.6	95		75 - 125
1,4-Dichlorobenzene	ug/L	50	0	49.7	99		75 - 125
2,2-Dichloropropane	ug/L	50	0	49.2	98		70 - 135
2-Butanone	ug/L	50	0	39.6	79		30 - 150
2-Chlorotoluene	ug/L	50	0	49.5	99		75 - 125
2-Hexanone	ug/L	50	0	37.2	74		55 - 130
4-Chlorotoluene	ug/L	50	0	48.8	98		75 - 130
4-Isopropyltoluene	ug/L	50	0	52.9	106		75 - 130
4-Methyl-2-pentanone	ug/L	50	0	48.6	97		60 - 135
Acetone	ug/L	50	0	23.5	47		40 - 140
Benzene	ug/L	50	0	48.1	96		80 - 120
Bromobenzene	ug/L	50	0	46.1	92		75 - 125
Bromochloromethane	ug/L	50	0	47.8	96		65 - 130
Bromodichloromethane	ug/L	50	0	47.1	94		75 - 120
Bromoform	ug/L	50	0	45.2	90		70 - 130
Bromomethane	ug/L	50	0	53.9	108		30 - 145
Carbon disulfide	ug/L	50	0	52.3	105		35 - 160

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD : 0 out of 64 outside limits

Spike Recovery: 0 out of 128 outside limits

214102205 88

3A

WATER VOLATILE MS/MSD RECOVERY

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix Spike - EPA Sample No: MWQ-24

Analytical Batch: 544000

Carbon tetrachloride	ug/L	50	0	48.2	96		65 - 140
Chlorobenzene	ug/L	50	0	50.1	100		80 - 120
Chloroethane	ug/L	50	0	54.8	110		60 - 135
Chloroform	ug/L	50	0	49.9	100		65 - 135
Chloromethane	ug/L	50	0	50.1	100		40 - 125
Dibromomethane	ug/L	50	0	46.3	93		75 - 125
Dichlorodifluoromethane	ug/L	50	0	48.6	97		30 - 155
Ethylbenzene	ug/L	50	0	48.9	98		75 - 125
Hexachlorobutadiene	ug/L	50	0	48.8	98		50 - 140
Isopropylbenzene (Cumene)	ug/L	50	0	52.6	105		75 - 125
Methylene chloride	ug/L	50	0	49.2	98		55 - 140
Naphthalene	ug/L	50	0	44.5	89		55 - 140
Styrene	ug/L	50	0	51.1	102		65 - 135
Tetrachloroethene	ug/L	50	0	50.3	101		45 - 150
Toluene	ug/L	50	0	49.4	99		75 - 120
Trichloroethene	ug/L	50	0	48.9	98		70 - 125
Trichlorofluoromethane	ug/L	50	0	50.2	100		60 - 145
Vinyl chloride	ug/L	50	0	43.7	87		50 - 145
cis-1,2-Dichloroethene	ug/L	50	0	47.5	95		70 - 125
cis-1,3-Dichloropropene	ug/L	50	0	47.5	95		70 - 130
m,p-Xylene	ug/L	100	0	100	100		75 - 130
n-Butylbenzene	ug/L	50	0	50.6	101		70 - 135
n-Propylbenzene	ug/L	50	0	49.1	98		70 - 130
o-Xylene	ug/L	50	0	51.6	103		80 - 120
sec-Butylbenzene	ug/L	50	0	52.3	105		70 - 125
tert-Butyl methyl ether (MTBE)	ug/L	50	0	50.5	101		65 - 125
tert-Butylbenzene	ug/L	50	0	52.1	104		70 - 130
trans-1,2-Dichloroethene	ug/L	50	0	48	96		60 - 140
trans-1,3-Dichloropropene	ug/L	50	0	50.1	100		55 - 140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD : 0 out of 64 outside limits

Spike Recovery: 0 out of 128 outside limits

3A

WATER VOLATILE MS/MSD RECOVERY

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix Spike - EPA Sample No: MWQ-24

Analytical Batch: 544000

SAMPLE NO. : 21410220517

COMPOUND	UNITS	SPIKE ADDED	MSD CONC.	MSD % REC	#	% RPD	#	QC. LIMITS REC	QC. LIMITS RPD
1,1,1,2-Tetrachloroethane	ug/L	50	46.8	94		.6		80 - 130	0 - 30
1,1,1-Trichloroethane	ug/L	50	45.4	91		5		65 - 130	0 - 30
1,1,2,2-Tetrachloroethane	ug/L	50	50.1	100		1		65 - 130	0 - 30
1,1,2-Trichloroethane	ug/L	50	45.4	91		1		75 - 125	0 - 30
1,1-Dichloroethane	ug/L	50	47.4	95		3		70 - 135	0 - 30
1,1-Dichloroethene	ug/L	50	48.8	98		6		70 - 130	0 - 30
1,1-Dichloropropene	ug/L	50	51.3	103		2		75 - 130	0 - 30
1,2,3-Trichlorobenzene	ug/L	50	46.4	93		0		55 - 140	0 - 30
1,2,3-Trichloropropane	ug/L	50	49.6	99		2		75 - 125	0 - 30
1,2,4-Trichlorobenzene	ug/L	50	48.8	98		2		65 - 135	0 - 30
1,2,4-Trimethylbenzene	ug/L	50	50.1	100		1		75 - 130	0 - 30
1,2-Dibromo-3-chloropropane	ug/L	50	50.9	102		3		50 - 130	0 - 30
1,2-Dibromoethane	ug/L	50	47.7	95		2		80 - 120	0 - 30
1,2-Dichlorobenzene	ug/L	50	46.6	93		2		70 - 120	0 - 30
1,2-Dichloroethane	ug/L	50	46.9	94		2		70 - 130	0 - 30
1,2-Dichloropropane	ug/L	50	46.2	92		4		75 - 125	0 - 30
1,3,5-Trimethylbenzene	ug/L	50	50.3	101		3		75 - 130	0 - 30
1,3-Dichlorobenzene	ug/L	50	45.7	91		3		75 - 125	0 - 30
1,3-Dichloropropane	ug/L	50	47.5	95		.2		75 - 125	0 - 30
1,4-Dichlorobenzene	ug/L	50	47	94		6		75 - 125	0 - 30
2,2-Dichloropropane	ug/L	50	46.3	93		6		70 - 135	0 - 30
2-Butanone	ug/L	50	41.3	83		4		30 - 150	0 - 30
2-Chlorotoluene	ug/L	50	47.9	96		3		75 - 125	0 - 30
2-Hexanone	ug/L	50	40.5	81		8		55 - 130	0 - 30
4-Chlorotoluene	ug/L	50	47.9	96		2		75 - 130	0 - 30
4-Isopropyltoluene	ug/L	50	51.2	102		3		75 - 130	0 - 30
4-Methyl-2-pentanone	ug/L	50	51.5	103		6		60 - 135	0 - 30
Acetone	ug/L	50	25.5	51		8		40 - 140	0 - 30
Benzene	ug/L	50	46.1	92		4		80 - 120	0 - 30
Bromobenzene	ug/L	50	44.2	88		4		75 - 125	0 - 30
Bromochloromethane	ug/L	50	45.7	91		4		65 - 130	0 - 30
Bromodichloromethane	ug/L	50	46.3	93		2		75 - 120	0 - 30
Bromoform	ug/L	50	46	92		2		70 - 130	0 - 30
Bromomethane	ug/L	50	47.9	96		12		30 - 145	0 - 30
Carbon disulfide	ug/L	50	48.7	97		7		35 - 160	0 - 30

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD : 0 out of 64 outside limits

Spike Recovery: 0 out of 128 outside limits

214102205 90

3A

WATER VOLATILE MS/MSD RECOVERY

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix Spike - EPA Sample No: MWQ-24

Analytical Batch: 544000

Carbon tetrachloride	ug/L	50	45.6	91		6		65 - 140	0 - 30
Chlorobenzene	ug/L	50	48.8	98		3		80 - 120	0 - 30
Chloroethane	ug/L	50	52.4	105		4		60 - 135	0 - 30
Chloroform	ug/L	50	48.6	97		3		65 - 135	0 - 30
Chloromethane	ug/L	50	49	98		2		40 - 125	0 - 30
Dibromomethane	ug/L	50	47.1	94		2		75 - 125	0 - 30
Dichlorodifluoromethane	ug/L	50	46.2	92		5		30 - 155	0 - 30
Ethylbenzene	ug/L	50	47.6	95		3		75 - 125	0 - 30
Hexachlorobutadiene	ug/L	50	47.7	95		2		50 - 140	0 - 30
Isopropylbenzene (Cumene)	ug/L	50	51.7	103		2		75 - 125	0 - 30
Methylene chloride	ug/L	50	48.4	97		2		55 - 140	0 - 30
Naphthalene	ug/L	50	45.4	91		2		55 - 140	0 - 30
Styrene	ug/L	50	50.7	101		.8		65 - 135	0 - 30
Tetrachloroethene	ug/L	50	48.9	98		3		45 - 150	0 - 30
Toluene	ug/L	50	47.7	95		4		75 - 120	0 - 30
Trichloroethene	ug/L	50	47.1	94		4		70 - 125	0 - 30
Trichlorofluoromethane	ug/L	50	45.1	90		11		60 - 145	0 - 30
Vinyl chloride	ug/L	50	42.2	84		3		50 - 145	0 - 30
cis-1,2-Dichloroethene	ug/L	50	46.7	93		2		70 - 125	0 - 30
cis-1,3-Dichloropropene	ug/L	50	46.5	93		2		70 - 130	0 - 30
m,p-Xylene	ug/L	100	97.8	98		2		75 - 130	0 - 30
n-Butylbenzene	ug/L	50	49.1	98		3		70 - 135	0 - 30
n-Propylbenzene	ug/L	50	47.3	95		4		70 - 130	0 - 30
o-Xylene	ug/L	50	50.3	101		3		80 - 120	0 - 30
sec-Butylbenzene	ug/L	50	50.6	101		3		70 - 125	0 - 30
tert-Butyl methyl ether (MTBE)	ug/L	50	50.4	101		.2		65 - 125	0 - 30
tert-Butylbenzene	ug/L	50	50	100		4		70 - 130	0 - 30
trans-1,2-Dichloroethene	ug/L	50	47.4	95		1		60 - 140	0 - 30
trans-1,3-Dichloropropene	ug/L	50	49.8	100		.6		55 - 140	0 - 30

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD : 0 out of 64 outside limits

Spike Recovery: 0 out of 128 outside limits

FORM III VOA-1

3A

WATER VOLATILE LCS/LCSD RECOVERY

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Analytical Batch: 544000

SAMPLE NO. : 1375110

COMPOUND	*UNITS*	*SPIKE ADDED*	*SAMPLE CONCENTRATION*	*LCS CONCENTRATION*	*LCS % REC*	#	*QC. LIMITS*
1,1,1,2-Tetrachloroethane	ug/L	50	0	47.2	94		80 - 130
1,1,1-Trichloroethane	ug/L	50	0	46.1	92		65 - 130
1,1,2,2-Tetrachloroethane	ug/L	50	0	48.7	97		65 - 130
1,1,2-Trichloroethane	ug/L	50	0	46.4	93		75 - 125
1,1-Dichloroethane	ug/L	50	0	48.2	96		70 - 135
1,1-Dichloroethene	ug/L	50	0	50.5	101		70 - 130
1,1-Dichloropropene	ug/L	50	0	52.1	104		75 - 130
1,2,3-Trichlorobenzene	ug/L	50	0	49	98		55 - 140
1,2,3-Trichloropropane	ug/L	50	0	49.8	100		75 - 125
1,2,4-Trichlorobenzene	ug/L	50	0	53.6	107		65 - 135
1,2,4-Trimethylbenzene	ug/L	50	0	53.9	108		75 - 130
1,2-Dibromo-3-chloropropane	ug/L	50	0	50.3	101		50 - 130
1,2-Dibromoethane	ug/L	50	0	47.6	95		80 - 120
1,2-Dichlorobenzene	ug/L	50	0	49.9	100		70 - 120
1,2-Dichloroethane	ug/L	50	0	47.7	95		70 - 130
1,2-Dichloropropane	ug/L	50	0	47.4	95		75 - 125
1,3,5-Trimethylbenzene	ug/L	50	0	53.2	106		75 - 130
1,3-Dichlorobenzene	ug/L	50	0	49.1	98		75 - 125
1,3-Dichloropropane	ug/L	50	0	47.7	95		75 - 125
1,4-Dichlorobenzene	ug/L	50	0	50.8	102		75 - 125
2,2-Dichloropropane	ug/L	50	0	50.1	100		70 - 135
2-Butanone	ug/L	50	0	50.9	102		30 - 150
2-Chlorotoluene	ug/L	50	0	50.1	100		75 - 125
2-Hexanone	ug/L	50	0	45.2	90		55 - 130
4-Chlorotoluene	ug/L	50	0	50.9	102		75 - 130
4-Isopropyltoluene	ug/L	50	0	55.5	111		75 - 130
4-Methyl-2-pentanone	ug/L	50	0	48.7	97		60 - 135
Acetone	ug/L	50	0	42.7	85		40 - 140
Benzene	ug/L	50	0	47.5	95		80 - 120
Bromobenzene	ug/L	50	0	47.9	96		75 - 125
Bromochloromethane	ug/L	50	0	48	96		65 - 130
Bromodichloromethane	ug/L	50	0	47.2	94		75 - 120
Bromoform	ug/L	50	0	45.7	91		70 - 130
Bromomethane	ug/L	50	0	50	100		30 - 145
Carbon disulfide	ug/L	50	0	51.2	102		35 - 160

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD : 0 out of 64 outside limits

Spike Recovery: 0 out of 128 outside limits

FORM III VOA-1

3A

WATER VOLATILE LCS/LCSD RECOVERY

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Analytical Batch: 544000

Carbon tetrachloride	ug/L	50	0	47.6	95		65 - 140
Chlorobenzene	ug/L	50	0	50	100		80 - 120
Chloroethane	ug/L	50	0	51.9	104		60 - 135
Chloroform	ug/L	50	0	49	98		65 - 135
Chloromethane	ug/L	50	0	48.8	98		40 - 125
Dibromomethane	ug/L	50	0	46.3	93		75 - 125
Dichlorodifluoromethane	ug/L	50	0	46.8	94		30 - 155
Ethylbenzene	ug/L	50	0	49.8	100		75 - 125
Hexachlorobutadiene	ug/L	50	0	51.2	102		50 - 140
Isopropylbenzene (Cumene)	ug/L	50	0	53.1	106		75 - 125
Methylene chloride	ug/L	50	0	48	96		55 - 140
Naphthalene	ug/L	50	0	46.1	92		55 - 140
Styrene	ug/L	50	0	53.6	107		65 - 135
Tetrachloroethene	ug/L	50	0	51.2	102		45 - 150
Toluene	ug/L	50	0	48.9	98		75 - 120
Trichloroethene	ug/L	50	0	48.9	98		70 - 125
Trichlorofluoromethane	ug/L	50	0	47.6	95		60 - 145
Vinyl chloride	ug/L	50	0	41.4	83		50 - 145
cis-1,2-Dichloroethene	ug/L	50	0	47.4	95		70 - 125
cis-1,3-Dichloropropene	ug/L	50	0	52.4	105		70 - 130
m,p-Xylene	ug/L	100	0	101	101		75 - 130
n-Butylbenzene	ug/L	50	0	53	106		70 - 135
n-Propylbenzene	ug/L	50	0	50	100		70 - 130
o-Xylene	ug/L	50	0	52.3	105		80 - 120
sec-Butylbenzene	ug/L	50	0	53.7	107		70 - 125
tert-Butyl methyl ether (MTBE)	ug/L	50	0	50.4	101		65 - 125
tert-Butylbenzene	ug/L	50	0	52.6	105		70 - 130
trans-1,2-Dichloroethene	ug/L	50	0	48.6	97		60 - 140
trans-1,3-Dichloropropene	ug/L	50	0	51.5	103		55 - 140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD : 0 out of 64 outside limits

Spike Recovery: 0 out of 128 outside limits

3A

WATER VOLATILE LCS/LCSD RECOVERY

-

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Analytical Batch: 544000

SAMPLE NO. : 1375111

COMPOUND	*UNITS*	*SPIKE ADDED*	*LCSD CONC.*	*LCSD % REC*	#	*% RPD*	#	*QC. LIMITS REC*	*RPD*
1,1,1,2-Tetrachloroethane	ug/L	50	46.7	93		1		80 - 130	0 - 30
1,1,1-Trichloroethane	ug/L	50	46.5	93		.9		65 - 130	0 - 30
1,1,2,2-Tetrachloroethane	ug/L	50	47.9	96		2		65 - 130	0 - 30
1,1,2-Trichloroethane	ug/L	50	45.8	92		1		75 - 125	0 - 30
1,1-Dichloroethane	ug/L	50	47.9	96		.6		70 - 135	0 - 30
1,1-Dichloroethene	ug/L	50	46.6	93		8		70 - 130	0 - 30
1,1-Dichloropropene	ug/L	50	51.5	103		1		75 - 130	0 - 30
1,2,3-Trichlorobenzene	ug/L	50	48.3	97		1		55 - 140	0 - 30
1,2,3-Trichloropropane	ug/L	50	46.9	94		6		75 - 125	0 - 30
1,2,4-Trichlorobenzene	ug/L	50	51	102		5		65 - 135	0 - 30
1,2,4-Trimethylbenzene	ug/L	50	51.2	102		5		75 - 130	0 - 30
1,2-Dibromo-3-chloropropane	ug/L	50	47.8	96		5		50 - 130	0 - 30
1,2-Dibromoethane	ug/L	50	46.8	94		2		80 - 120	0 - 30
1,2-Dichlorobenzene	ug/L	50	48.5	97		3		70 - 120	0 - 30
1,2-Dichloroethane	ug/L	50	46.6	93		2		70 - 130	0 - 30
1,2-Dichloropropane	ug/L	50	46.5	93		2		75 - 125	0 - 30
1,3,5-Trimethylbenzene	ug/L	50	51.5	103		3		75 - 130	0 - 30
1,3-Dichlorobenzene	ug/L	50	47.6	95		3		75 - 125	0 - 30
1,3-Dichloropropane	ug/L	50	47.4	95		.6		75 - 125	0 - 30
1,4-Dichlorobenzene	ug/L	50	49	98		4		75 - 125	0 - 30
2,2-Dichloropropane	ug/L	50	49	98		2		70 - 135	0 - 30
2-Butanone	ug/L	50	49.2	98		3		30 - 150	0 - 30
2-Chlorotoluene	ug/L	50	49.2	98		2		75 - 125	0 - 30
2-Hexanone	ug/L	50	43.4	87		4		55 - 130	0 - 30
4-Chlorotoluene	ug/L	50	48.9	98		4		75 - 130	0 - 30
4-Isopropyltoluene	ug/L	50	51.9	104		7		75 - 130	0 - 30
4-Methyl-2-pentanone	ug/L	50	47.8	96		2		60 - 135	0 - 30
Acetone	ug/L	50	44	88		3		40 - 140	0 - 30
Benzene	ug/L	50	46.3	93		3		80 - 120	0 - 30
Bromobenzene	ug/L	50	46.3	93		3		75 - 125	0 - 30
Bromochloromethane	ug/L	50	47.8	96		.4		65 - 130	0 - 30
Bromodichloromethane	ug/L	50	45.7	91		3		75 - 120	0 - 30
Bromoform	ug/L	50	44.9	90		2		70 - 130	0 - 30
Bromomethane	ug/L	50	50.9	102		2		30 - 145	0 - 30
Carbon disulfide	ug/L	50	46.9	94		9		35 - 160	0 - 30

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD : 0 out of 64 outside limits

Spike Recovery: 0 out of 128 outside limits

3A

WATER VOLATILE LCS/LCSD RECOVERY

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Analytical Batch: 544000

Carbon tetrachloride	ug/L	50	46.4	93		3		65 - 140	0 - 30
Chlorobenzene	ug/L	50	49.2	98		2		80 - 120	0 - 30
Chloroethane	ug/L	50	48.6	97		7		60 - 135	0 - 30
Chloroform	ug/L	50	48.1	96		2		65 - 135	0 - 30
Chloromethane	ug/L	50	40.3	81		19		40 - 125	0 - 30
Dibromomethane	ug/L	50	46.3	93		0		75 - 125	0 - 30
Dichlorodifluoromethane	ug/L	50	45.4	91		3		30 - 155	0 - 30
Ethylbenzene	ug/L	50	48.1	96		3		75 - 125	0 - 30
Hexachlorobutadiene	ug/L	50	48	96		6		50 - 140	0 - 30
Isopropylbenzene (Cumene)	ug/L	50	51.5	103		3		75 - 125	0 - 30
Methylene chloride	ug/L	50	48.2	96		.4		55 - 140	0 - 30
Naphthalene	ug/L	50	44.8	90		3		55 - 140	0 - 30
Styrene	ug/L	50	52.2	104		3		65 - 135	0 - 30
Tetrachloroethene	ug/L	50	50.7	101		1		45 - 150	0 - 30
Toluene	ug/L	50	48.2	96		1		75 - 120	0 - 30
Trichloroethene	ug/L	50	48.8	98		.2		70 - 125	0 - 30
Trichlorofluoromethane	ug/L	50	46.9	94		1		60 - 145	0 - 30
Vinyl chloride	ug/L	50	42	84		1		50 - 145	0 - 30
cis-1,2-Dichloroethene	ug/L	50	47.2	94		.4		70 - 125	0 - 30
cis-1,3-Dichloropropene	ug/L	50	51.7	103		1		70 - 130	0 - 30
m,p-Xylene	ug/L	100	98.9	99		2		75 - 130	0 - 30
n-Butylbenzene	ug/L	50	50.8	102		4		70 - 135	0 - 30
n-Propylbenzene	ug/L	50	48.6	97		3		70 - 130	0 - 30
o-Xylene	ug/L	50	51.4	103		2		80 - 120	0 - 30
sec-Butylbenzene	ug/L	50	51.7	103		4		70 - 125	0 - 30
tert-Butyl methyl ether (MTBE)	ug/L	50	50.8	102		.8		65 - 125	0 - 30
tert-Butylbenzene	ug/L	50	51.1	102		3		70 - 130	0 - 30
trans-1,2-Dichloroethene	ug/L	50	47.7	95		2		60 - 140	0 - 30
trans-1,3-Dichloropropene	ug/L	50	49.4	99		4		55 - 140	0 - 30

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD : 0 out of 64 outside limits

Spike Recovery: 0 out of 128 outside limits

3A

WATER VOLATILE LCS/LCSD RECOVERY

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Analytical Batch: 544101

SAMPLE NO. : 1375612

COMPOUND	*UNITS*	*SPIKE ADDED*	*SAMPLE CONCENTRATION*	*LCS CONCENTRATION*	*LCS % REC*	*#*	*QC. LIMITS*
1,1,1,2-Tetrachloroethane	ug/L	50	0	41.4	83		80 - 130
1,1,1-Trichloroethane	ug/L	50	0	43.2	86		65 - 130
1,1,2,2-Tetrachloroethane	ug/L	50	0	40.1	80		65 - 130
1,1,2-Trichloroethane	ug/L	50	0	45.2	90		75 - 125
1,1-Dichloroethane	ug/L	50	0	43.5	87		70 - 135
1,1-Dichloroethene	ug/L	50	0	42.4	85		70 - 130
1,1-Dichloropropene	ug/L	50	0	45.5	91		75 - 130
1,2,3-Trichlorobenzene	ug/L	50	0	46.4	93		55 - 140
1,2,3-Trichloropropane	ug/L	50	0	42.5	85		75 - 125
1,2,4-Trichlorobenzene	ug/L	50	0	48.1	96		65 - 135
1,2,4-Trimethylbenzene	ug/L	50	0	46.5	93		75 - 130
1,2-Dibromo-3-chloropropane	ug/L	50	0	44	88		50 - 130
1,2-Dibromoethane	ug/L	50	0	41.8	84		80 - 120
1,2-Dichlorobenzene	ug/L	50	0	43.1	86		70 - 120
1,2-Dichloroethane	ug/L	50	0	45.1	90		70 - 130
1,2-Dichloropropane	ug/L	50	0	46	92		75 - 125
1,3,5-Trimethylbenzene	ug/L	50	0	45.1	90		75 - 130
1,3-Dichlorobenzene	ug/L	50	0	45.9	92		75 - 125
1,3-Dichloropropane	ug/L	50	0	45.9	92		75 - 125
1,4-Dichlorobenzene	ug/L	50	0	46	92		75 - 125
2,2-Dichloropropane	ug/L	50	0	46.3	93		70 - 135
2-Butanone	ug/L	50	0	49.7	99		30 - 150
2-Chlorotoluene	ug/L	50	0	44.5	89		75 - 125
2-Hexanone	ug/L	50	0	50.5	101		55 - 130
4-Chlorotoluene	ug/L	50	0	44.6	89		75 - 130
4-Isopropyltoluene	ug/L	50	0	46.4	93		75 - 130
4-Methyl-2-pentanone	ug/L	50	0	48	96		60 - 135
Acetone	ug/L	50	0	53.1	106		40 - 140
Benzene	ug/L	50	0	46.2	92		80 - 120
Bromobenzene	ug/L	50	0	44.3	89		75 - 125
Bromochloromethane	ug/L	50	0	41.2	82		65 - 130
Bromodichloromethane	ug/L	50	0	43.4	87		75 - 120
Bromoform	ug/L	50	0	40.5	81		70 - 130
Bromomethane	ug/L	50	0	44.3	89		30 - 145
Carbon disulfide	ug/L	50	0	43.5	87		35 - 160

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD : 1 out of 64 outside limits

Spike Recovery: 1 out of 128 outside limits

3A

WATER VOLATILE LCS/LCSD RECOVERY

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Analytical Batch: 544101

Carbon tetrachloride	ug/L	50	0	45.5	91		65 - 140
Chlorobenzene	ug/L	50	0	44.8	90		80 - 120
Chloroethane	ug/L	50	0	51.5	103		60 - 135
Chloroform	ug/L	50	0	46.3	93		65 - 135
Chloromethane	ug/L	50	0	49.1	98		40 - 125
Dibromomethane	ug/L	50	0	44.2	88		75 - 125
Dichlorodifluoromethane	ug/L	50	0	46	92		30 - 155
Ethylbenzene	ug/L	50	0	44.5	89		75 - 125
Hexachlorobutadiene	ug/L	50	0	43.8	88		50 - 140
Isopropylbenzene (Cumene)	ug/L	50	0	44.5	89		75 - 125
Methylene chloride	ug/L	50	0	48.4	97		55 - 140
Naphthalene	ug/L	50	0	51.6	103		55 - 140
Styrene	ug/L	50	0	44.6	89		65 - 135
Tetrachloroethene	ug/L	50	0	41.1	82		45 - 150
Toluene	ug/L	50	0	45.1	90		75 - 120
Trichloroethene	ug/L	50	0	45.5	91		70 - 125
Trichlorofluoromethane	ug/L	50	0	45.2	90		60 - 145
Vinyl chloride	ug/L	50	0	48.9	98		50 - 145
cis-1,2-Dichloroethene	ug/L	50	0	46.8	94		70 - 125
cis-1,3-Dichloropropene	ug/L	50	0	44.9	90		70 - 130
m,p-Xylene	ug/L	100	0	85.2	85		75 - 130
n-Butylbenzene	ug/L	50	0	47	94		70 - 135
n-Propylbenzene	ug/L	50	0	44.6	89		70 - 130
o-Xylene	ug/L	50	0	43.4	87		80 - 120
sec-Butylbenzene	ug/L	50	0	46.7	93		70 - 125
tert-Butyl methyl ether (MTBE)	ug/L	50	0	44.8	90		65 - 125
tert-Butylbenzene	ug/L	50	0	46.4	93		70 - 130
trans-1,2-Dichloroethene	ug/L	50	0	47.1	94		60 - 140
trans-1,3-Dichloropropene	ug/L	50	0	44.2	88		55 - 140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD : 1 out of 64 outside limits

Spike Recovery: 1 out of 128 outside limits

FORM III VOA-1

3A

WATER VOLATILE LCS/LCSD RECOVERY

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Analytical Batch: 544101

SAMPLE NO. : 1375613

COMPOUND	*UNITS*	*SPIKE ADDED*	*LCSD CONC.*	*LCSD % REC*	#	*% RPD*	#	*QC. LIMITS REC*	*RPD*
1,1,1,2-Tetrachloroethane	ug/L	50	42.8	86		3		80 - 130	0 - 30
1,1,1-Trichloroethane	ug/L	50	47.2	94		9		65 - 130	0 - 30
1,1,2,2-Tetrachloroethane	ug/L	50	43.5	87		8		65 - 130	0 - 30
1,1,2-Trichloroethane	ug/L	50	48.9	98		8		75 - 125	0 - 30
1,1-Dichloroethane	ug/L	50	46.9	94		8		70 - 135	0 - 30
1,1-Dichloroethene	ug/L	50	45	90		6		70 - 130	0 - 30
1,1-Dichloropropene	ug/L	50	49.7	99		9		75 - 130	0 - 30
1,2,3-Trichlorobenzene	ug/L	50	47.3	95		2		55 - 140	0 - 30
1,2,3-Trichloropropane	ug/L	50	47.1	94		10		75 - 125	0 - 30
1,2,4-Trichlorobenzene	ug/L	50	47	94		2		65 - 135	0 - 30
1,2,4-Trimethylbenzene	ug/L	50	48.1	96		3		75 - 130	0 - 30
1,2-Dibromo-3-chloropropane	ug/L	50	48.2	96		9		50 - 130	0 - 30
1,2-Dibromoethane	ug/L	50	45.6	91		9		80 - 120	0 - 30
1,2-Dichlorobenzene	ug/L	50	46.6	93		8		70 - 120	0 - 30
1,2-Dichloroethane	ug/L	50	48.4	97		7		70 - 130	0 - 30
1,2-Dichloropropane	ug/L	50	49.3	99		7		75 - 125	0 - 30
1,3,5-Trimethylbenzene	ug/L	50	45.2	90		.2		75 - 130	0 - 30
1,3-Dichlorobenzene	ug/L	50	48.3	97		5		75 - 125	0 - 30
1,3-Dichloropropane	ug/L	50	48.9	98		6		75 - 125	0 - 30
1,4-Dichlorobenzene	ug/L	50	47.8	96		4		75 - 125	0 - 30
2,2-Dichloropropane	ug/L	50	49.7	99		7		70 - 135	0 - 30
2-Butanone	ug/L	50	58.8	118		17		30 - 150	0 - 30
2-Chlorotoluene	ug/L	50	44.4	89		.2		75 - 125	0 - 30
2-Hexanone	ug/L	50	58.3	117		14		55 - 130	0 - 30
4-Chlorotoluene	ug/L	50	44.9	90		.7		75 - 130	0 - 30
4-Isopropyltoluene	ug/L	50	48.9	98		5		75 - 130	0 - 30
4-Methyl-2-pentanone	ug/L	50	55.5	111		14		60 - 135	0 - 30
Acetone	ug/L	50	74.4	149	*	33	*	40 - 140	0 - 30
Benzene	ug/L	50	49.6	99		7		80 - 120	0 - 30
Bromobenzene	ug/L	50	45.1	90		2		75 - 125	0 - 30
Bromochloromethane	ug/L	50	45.1	90		9		65 - 130	0 - 30
Bromodichloromethane	ug/L	50	47.2	94		8		75 - 120	0 - 30
Bromoform	ug/L	50	46.9	94		15		70 - 130	0 - 30
Bromomethane	ug/L	50	49.3	99		11		30 - 145	0 - 30
Carbon disulfide	ug/L	50	44.6	89		2		35 - 160	0 - 30

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD : 1 out of 64 outside limits

Spike Recovery: 1 out of 128 outside limits

3A

WATER VOLATILE LCS/LCSD RECOVERY

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Analytical Batch: 544101

Carbon tetrachloride	ug/L	50	49.9	100		9		65 - 140	0 - 30
Chlorobenzene	ug/L	50	46.8	94		4		80 - 120	0 - 30
Chloroethane	ug/L	50	54.6	109		6		60 - 135	0 - 30
Chloroform	ug/L	50	49.4	99		6		65 - 135	0 - 30
Chloromethane	ug/L	50	52	104		6		40 - 125	0 - 30
Dibromomethane	ug/L	50	50	100		12		75 - 125	0 - 30
Dichlorodifluoromethane	ug/L	50	49.9	100		8		30 - 155	0 - 30
Ethylbenzene	ug/L	50	47.1	94		6		75 - 125	0 - 30
Hexachlorobutadiene	ug/L	50	43	86		2		50 - 140	0 - 30
Isopropylbenzene (Cumene)	ug/L	50	48.5	97		9		75 - 125	0 - 30
Methylene chloride	ug/L	50	51	102		5		55 - 140	0 - 30
Naphthalene	ug/L	50	56.1	112		8		55 - 140	0 - 30
Styrene	ug/L	50	49.2	98		10		65 - 135	0 - 30
Tetrachloroethene	ug/L	50	45	90		9		45 - 150	0 - 30
Toluene	ug/L	50	48	96		6		75 - 120	0 - 30
Trichloroethene	ug/L	50	49.6	99		9		70 - 125	0 - 30
Trichlorofluoromethane	ug/L	50	49.4	99		9		60 - 145	0 - 30
Vinyl chloride	ug/L	50	52.2	104		7		50 - 145	0 - 30
cis-1,2-Dichloroethene	ug/L	50	49.5	99		6		70 - 125	0 - 30
cis-1,3-Dichloropropene	ug/L	50	48.5	97		8		70 - 130	0 - 30
m,p-Xylene	ug/L	100	90.5	91		6		75 - 130	0 - 30
n-Butylbenzene	ug/L	50	49.9	100		6		70 - 135	0 - 30
n-Propylbenzene	ug/L	50	45.4	91		2		70 - 130	0 - 30
o-Xylene	ug/L	50	48.4	97		11		80 - 120	0 - 30
sec-Butylbenzene	ug/L	50	48.4	97		4		70 - 125	0 - 30
tert-Butyl methyl ether (MTBE)	ug/L	50	49.2	98		9		65 - 125	0 - 30
tert-Butylbenzene	ug/L	50	47.6	95		3		70 - 130	0 - 30
trans-1,2-Dichloroethene	ug/L	50	50.4	101		7		60 - 140	0 - 30
trans-1,3-Dichloropropene	ug/L	50	48.7	97		10		55 - 140	0 - 30

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD : 1 out of 64 outside limits

Spike Recovery: 1 out of 128 outside limits

FORM III VOA-1

4A

VOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

MB1373754

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Lab File ID: 2141024/I7908 Lab Sample ID: 1373754 Date Extracted:

GC Column: RTX-VMS-30 ID: .25 (mm) Date Analyzed: 10/24/14 Time: 1738

Instrument ID: MSV12 Matrix: Water Heated Purge: N

Level:

Prep Batch: Analytical Batch: 543720

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1.	LCS1373755	1373755	2141024/I7903	10/24/14	1542
2.	LCSD1373756	1373756	2141024/I7904	10/24/14	1605
3.	MA01MW002	21410220501	2141024/I7909	10/24/14	1800
4.	MA01MW002-c	21410220502	2141024/I7910	10/24/14	1823
5.	MA01MW001	21410220503	2141024/I7911	10/24/14	1846
6.	MA01MW004	21410220504	2141024/I7912	10/24/14	1909
7.	MA01MW004-a	21410220505	2141024/I7913	10/24/14	1932
8.	MA01MW004-c	21410220506	2141024/I7914	10/24/14	1954
9.	MA01MW003	21410220507	2141024/I7915	10/24/14	2017
10.	MA01MW003-c	21410220508	2141024/I7916	10/24/14	2040
11.	M114MW002	21410220509	2141024/I7917	10/24/14	2102
12.	M114MW002-c	21410220510	2141024/I7918	10/24/14	2125

4A

VOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

MB1375109

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Lab File ID: 2141029p/j5242 Lab Sample ID: 1375109 Date Extracted:

GC Column: RTX-VMS-30 ID: .25 (mm) Date Analyzed: 10/29/14 Time: 2121

Instrument ID: MSV9 Matrix: Water Heated Purge: N

Level:

Prep Batch: Analytical Batch: 544000

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1.	LCS1375110	1375110	2141029p/j5238	10/29/14	1957
2.	LCSD1375111	1375111	2141029p/j5239	10/29/14	2017
3.	MWQ-24	21410220515	2141029p/j5243	10/29/14	2141
4.	MWQ-24-ms	21410220516	2141029p/j5244	10/29/14	2201
5.	MWQ-24-sd	21410220517	2141029p/j5245	10/29/14	2221
6.	M114MW003	21410220511	2141029p/j5247	10/29/14	2302
7.	M114MW004	21410220512	2141029p/j5248	10/29/14	2322
8.	M114MW004-c	21410220513	2141029p/j5249	10/29/14	2342
9.	M114MW001	21410220514	2141029p/j5250	10/30/14	0002
10.	MWQ-24-c	21410220519	2141029p/j5251	10/30/14	0022
11.	MA02MW001D	21410220520	2141029p/j5252	10/30/14	0042

4A

VOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

MB1375611

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Lab File ID: 2141030p/i1827 Lab Sample ID: 1375611 Date Extracted:

GC Column: RTX-VMS-30 ID: .25 (mm) Date Analyzed: 10/30/14 Time: 2321

Instrument ID: MSV8 Matrix: Water Heated Purge: N

Level:

Prep Batch: Analytical Batch: 544101

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1.	LCS1375612	1375612	2141030p/i1823	10/30/14	2203
2.	LCSD1375613	1375613	2141030p/i1824	10/30/14	2223
3.	MA02MW001D-c	21410220521	2141030p/i1832	10/31/14	0057

5A

VOLATILE ORGANICS INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Lab File ID: 2141019/i1469D BFB Injection Date: 10/19/14

Instrument ID: MSV8 BFB Injection Time: 0922

GC Column: RTX-VMS-30 ID: .25 (mm)

Analytical Batch: 544143

m / e	ION ABUNDANCE CRITERIA	% Relative Abundance			
50	15.0 - 40.0% of mass 95	21.21	(	)	
75	30.0 - 60.0% of mass 95	50.05	(	)	
95	Base Peak, 100% relative abundance	100	(	)	
96	5.0 -9.0% of mass 95	6.5	(	)	
173	Less than 2.0% of mass 174	0	(0	)	1
174	50.0 - 120.0% of mass 95	83.02	(	)	
175	5.0 - 9.0% of mass 174	6.79	(8.19	)	1
176	95.0 - 101.0% of mass 174	80.44	(96.9	)	1
177	5.0 - 9.0% of mass 176	5.23	(6.51	)	2

1- Value is % mass 174

2- Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1.	V8STD001	1203	2141019/i1471D	10/19/14	1025
2.	V8STD005	1204	2141019/i1472D	10/19/14	1045
3.	V8STD010	1205	2141019/i1473D	10/19/14	1104
4.	V8STD020	1206	2141019/i1474D	10/19/14	1123
5.	V8STD050	1207	2141019/i1475D	10/19/14	1143
6.	V8STD100	1208	2141019/i1477D	10/19/14	1222
7.	V8STD200	1209	2141019/i1479D	10/19/14	1300
8.	V8ICV050	1600	2141019/i1482D	10/19/14	1411

5A

VOLATILE ORGANICS INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Lab File ID: 2141030p/i1822 BFB Injection Date: 10/30/14

Instrument ID: MSV8 BFB Injection Time: 2121

GC Column: RTX-VMS-30 ID: .25 (mm)

Analytical Batch: 544101

m / e	ION ABUNDANCE CRITERIA	% Relative Abundance			
50	15.0 - 40.0% of mass 95	22.58	(	)	
75	30.0 - 60.0% of mass 95	54.98	(	)	
95	Base Peak, 100% relative abundance	100	(	)	
96	5.0 -9.0% of mass 95	6.26	(	)	
173	Less than 2.0% of mass 174	0	(0	)	1
174	50.0 - 120.0% of mass 95	81.4	(	)	
175	5.0 - 9.0% of mass 174	6.48	(7.97	)	1
176	95.0 - 101.0% of mass 174	79.13	(97.22	)	1
177	5.0 - 9.0% of mass 176	5	(6.33	)	2

1- Value is % mass 174

2- Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1.	V8STD050	1400	2141030p/i1823	10/30/14	2203
2.	LCS1375612	1375612	2141030p/i1823	10/30/14	2203
3.	LCSD1375613	1375613	2141030p/i1824	10/30/14	2223
4.	MB1375611	1375611	2141030p/i1827	10/30/14	2321
5.	MA02MW001D-c	21410220521	2141030p/i1832	10/31/14	0057

5A

VOLATILE ORGANICS INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Lab File ID: 2141024/j4996d BFB Injection Date: 10/24/14

Instrument ID: MSV9 BFB Injection Time: 0941

GC Column: RTX-VMS-30 ID: .25 (mm)

Analytical Batch: 543737

m / e	ION ABUNDANCE CRITERIA	% Relative Abundance			
50	15.0 - 40.0% of mass 95	22.45	(	)	
75	30.0 - 60.0% of mass 95	51.14	(	)	
95	Base Peak, 100% relative abundance	100	(	)	
96	5.0 -9.0% of mass 95	6.61	(	)	
173	Less than 2.0% of mass 174	1.31	(1.56	)	1
174	50.0 - 120.0% of mass 95	84.1	(	)	
175	5.0 - 9.0% of mass 174	6.37	(7.58	)	1
176	95.0 - 101.0% of mass 174	80.93	(96.24	)	1
177	5.0 - 9.0% of mass 176	5.44	(6.73	)	2

1- Value is % mass 174

2- Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1.	V9STD001	1203	2141024/j4999d	10/24/14	1122
2.	V9STD005	1204	2141024/j5000d	10/24/14	1142
3.	V9STD010	1205	2141024/j5001d	10/24/14	1202
4.	V9STD020	1206	2141024/j5002d	10/24/14	1222
5.	V9STD050	1207	2141024/j5003d	10/24/14	1242
6.	V9STD100	1208	2141024/j5005d	10/24/14	1323
7.	V9STD200	1209	2141024/j5007d	10/24/14	1403
8.	ICVSTD050	1600	2141024/j5011d	10/24/14	1539
9.	A9STD050	1400	2141024/j5014	10/24/14	1643

5A

VOLATILE ORGANICS INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

-

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Lab File ID: 2141029p/j5235 BFB Injection Date: 10/29/14

Instrument ID: MSV9 BFB Injection Time: 1812

GC Column: RTX-VMS-30 ID: .25 (mm)

Analytical Batch: 544000

m / e	*ION ABUNDANCE CRITERIA*	*% Relative Abundance*			
50	15.0 - 40.0% of mass 95	21.44	(	)	
75	30.0 - 60.0% of mass 95	51.98	(	)	
95	Base Peak, 100% relative abundance	100	(	)	
96	5.0 -9.0% of mass 95	6.12	(	)	
173	Less than 2.0% of mass 174	1.58	(1.85	)	1
174	50.0 - 120.0% of mass 95	85.42	(	)	
175	5.0 - 9.0% of mass 174	6.56	(7.69	)	1
176	95.0 - 101.0% of mass 174	81.16	(95.02	)	1
177	5.0 - 9.0% of mass 176	4.9	(6.04	)	2

1- Value is % mass 174 2- Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	SAMPLE NO.	*LAB SAMPLE ID*	*LAB FILE ID*	*DATE ANALYZED*	*TIME ANALYZED*
1.	V9STD050	1400	2141029p/j5238	10/29/14	1957
2.	LCS1375110	1375110	2141029p/j5238	10/29/14	1957
3.	LCSD1375111	1375111	2141029p/j5239	10/29/14	2017
4.	MB1375109	1375109	2141029p/j5242	10/29/14	2121
5.	MWQ-24	21410220515	2141029p/j5243	10/29/14	2141
6.	MWQ-24-ms	21410220516	2141029p/j5244	10/29/14	2201
7.	MWQ-24-sd	21410220517	2141029p/j5245	10/29/14	2221
8.	M114MW003	21410220511	2141029p/j5247	10/29/14	2302
9.	M114MW004	21410220512	2141029p/j5248	10/29/14	2322
10.	M114MW004-c	21410220513	2141029p/j5249	10/29/14	2342
11.	M114MW001	21410220514	2141029p/j5250	10/30/14	0002
12.	MWQ-24-c	21410220519	2141029p/j5251	10/30/14	0022
13.	MA02MW001D	21410220520	2141029p/j5252	10/30/14	0042

5A

VOLATILE ORGANICS INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: GCAL

Contract:

Lab Code: LA024 Case No.:

SAS No.: SDG No.: 214102205

Lab File ID: 2141024/I7889d

BFB Injection Date: 10/24/14

Instrument ID: MSV12

BFB Injection Time: 0926

GC Column: RTX-VMS-30 ID: .25 (mm)

Analytical Batch: 543720

m / e	ION ABUNDANCE CRITERIA	% Relative Abundance			
50	15.0 - 40.0% of mass 95	21.26	(	)	
75	30.0 - 60.0% of mass 95	50.92	(	)	
95	Base Peak, 100% relative abundance	100	(	)	
96	5.0 -9.0% of mass 95	6.84	(	)	
173	Less than 2.0% of mass 174	1.28	(1.21	)	1
174	50.0 - 120.0% of mass 95	106.1	(	)	
175	5.0 - 9.0% of mass 174	8.18	(7.71	)	1
176	95.0 - 101.0% of mass 174	102.3	(96.4	)	1
177	5.0 - 9.0% of mass 176	6.83	(6.68	)	2

1- Value is % mass 174

2- Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1.	V12STD001	1203	2141024/I7892d	10/24/14	1127
2.	V12STD005	1204	2141024/I7893d	10/24/14	1149
3.	V12STD010	1205	2141024/I7894d	10/24/14	1212
4.	V12STD020	1206	2141024/I7895d	10/24/14	1235
5.	V12STD050	1207	2141024/I7896d	10/24/14	1257
6.	V12STD100	1208	2141024/I7898d	10/24/14	1343
7.	V12STD200	1209	2141024/I7900d	10/24/14	1428
8.	ICVSTD050	1600	2141024/I7902d	10/24/14	1513
9.	LCS1373755	1373755	2141024/I7903	10/24/14	1542
10.	LCSD1373756	1373756	2141024/I7904	10/24/14	1605
11.	MB1373754	1373754	2141024/I7908	10/24/14	1738
12.	MA01MW002	21410220501	2141024/I7909	10/24/14	1800
13.	MA01MW002-c	21410220502	2141024/I7910	10/24/14	1823
14.	MA01MW001	21410220503	2141024/I7911	10/24/14	1846
15.	MA01MW004	21410220504	2141024/I7912	10/24/14	1909
16.	MA01MW004-a	21410220505	2141024/I7913	10/24/14	1932

5A

VOLATILE ORGANICS INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Lab File ID: 2141024/I7889d BFB Injection Date: 10/24/14

Instrument ID: MSV12 BFB Injection Time: 0926

GC Column: RTX-VMS-30 ID: .25 (mm)

Analytical Batch: 543720

17.	MA01MW004-c	21410220506	2141024/I7914	10/24/14	1954
18.	MA01MW003	21410220507	2141024/I7915	10/24/14	2017
19.	MA01MW003-c	21410220508	2141024/I7916	10/24/14	2040
20.	M114MW002	21410220509	2141024/I7917	10/24/14	2102
21.	M114MW002-c	21410220510	2141024/I7918	10/24/14	2125

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-OCT-2014 10:25
End Cal Date : 19-OCT-2014 13:00
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv8.i/2141019.s.b/8260dodw8.m
Cal Date : 31-Oct-2014 14:19 jck2

Calibration File Names:
Level 3: /var/chem/msv8.i/2141019.s.b/i1471D.d
Level 4: /var/chem/msv8.i/2141019.s.b/i1472D.d
Level 5: /var/chem/msv8.i/2141019.s.b/i1473D.d
Level 6: /var/chem/msv8.i/2141019.s.b/i1474D.d
Level 7: /var/chem/msv8.i/2141019.s.b/i1475D.d
Level 8: /var/chem/msv8.i/2141019.s.b/i1477D.d
Level 9: /var/chem/msv8.i/2141019.s.b/i1479D.d

Compound	1 Level 3 / 200 Level 9	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2	
1 Dichlorodifluoromethane	0.21805 0.19055	0.19263	0.18498	0.19984	0.20564	0.21579	AVRG		0.20107		6.31772	
2 Chloromethane ++	11172 1407730	36807	70986	147354	370127	730643	LINR	-0.03601	0.31761		0.99428	
4 1-3 Butadiene	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
3 Vinyl Chloride +	0.38278 0.25744	0.29838	0.26832	0.27643	0.28026	0.29439	AVRG		0.29400		14.15682	

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-OCT-2014 10:25
End Cal Date : 19-OCT-2014 13:00
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv8.i/2141019.s.b/8260dodw8.m
Cal Date : 31-Oct-2014 14:19 jck2

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	 m1	 m2	%RSD or R^2	
	200 Level 9											
5 Bromomethane	5701 599873	19228	36946	68250	169747	314672	LINR	-0.07321	0.13459		0.99337	
6 Chloroethane	5544 678297	19878	35906	76622	187828	351654	LINR	-0.05659	0.15239		0.99423	
9 Trichlorofluoromethane	0.46968 0.32319	0.37608	0.32046	0.33978	0.35175	0.37202	AVRG		0.36471		14.01402	
12 Ethyl Ether	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
13 1,1-Dichloroethene +	0.28604 0.20844	0.22110	0.20116	0.21745	0.22599	0.24078	AVRG		0.22871		12.35953	
19 1,1,2Trichlotrifluoroethane	0.28486 0.20252	0.23179	0.20145	0.21655	0.21815	0.23276	AVRG		0.22687		12.52459	
21 Carbon Disulfide	0.98734 0.69464	0.72791	0.67716	0.72833	0.74612	0.80128	AVRG		0.76611		13.74054	

21410225 410

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-OCT-2014 10:25
End Cal Date : 19-OCT-2014 13:00
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv8.i/2141019.s.b/8260dodw8.m
Cal Date : 31-Oct-2014 14:19 jck2

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2	
	200 Level 9											
14 Methyl Iodide	0.24467	0.20889	0.21315	0.24041	0.26984	0.30186						
	0.26856						AVRG		0.24962		13.28111	
8 Acrolein	0.02786	0.01779	0.02078	0.02385	0.02463	0.02661						
	0.02494						AVRG		0.02378		14.52385	
17 Allyl chloride	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+00		0.000e+00	<-
18 Methylene Chloride	14535	43570	84098	164143	419306	821702						
	1581557						LINR	-0.04165	0.35635		0.99426	
156 Ethanol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+00		0.000e+00	<-
11 Acetone	+++++	0.17219	0.14952	0.14892	0.18218	0.16075						
	0.16107						AVRG		0.16244		7.97644	
20 Methyl Acetate	+++++	0.31881	0.30639	0.34023	0.30847	0.30626						
	0.28658						AVRG		0.31112		5.68007	

21410220S 114

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-OCT-2014 10:25
End Cal Date : 19-OCT-2014 13:00
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv8.i/2141019.s.b/8260dodw8.m
Cal Date : 31-Oct-2014 14:19 jck2

Compound	1 Level 3 / 200 Level 9	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2	
22 trans-1,2-Dichloroethene	11793 / 1535029	39282	77078	159665	398881	789387	LINR	-0.03219	0.34576		0.99501	
32 Hexane	0.47590 / 0.41766	0.41676	0.34314	0.39421	0.44156	0.46801	AVRG		0.42246		10.77860	
25 MTBE	1.04176 / 0.79467	0.78062	0.82372	0.82728	0.87374	0.91167	AVRG		0.86478		10.41712	
15 tert-Butyl Alcohol	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
10 Acetonitrile	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
28 Isopropyl Ether	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
27 Chloroprene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-

2141102205.412

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-OCT-2014 10:25
End Cal Date : 19-OCT-2014 13:00
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv8.i/2141019.s.b/8260dodw8.m
Cal Date : 31-Oct-2014 14:19 jck2

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2
	200 Level 9										
26 1,1-Dichloroethane ++	0.66494	0.50673	0.48695	0.49399	0.50048	0.52837					
	0.46185						AVRG		0.52047		12.83703
16 Acrylonitrile	0.12776	0.08720	0.09790	0.12183	0.12173	0.12675					
	0.11412						AVRG		0.11390		13.65150
29 Vinyl Acetate	4967	11133	34059	76340	189931	417014					
	+++++						LINR	0.05867	0.20643		0.99399
23 cis-1,2-Dichloroethene	11532	39994	80642	164805	415108	825521					
	1609448						LINR	-0.02825	0.36262		0.99517
M 80 Total 1,2-Dichloroethene	23325	79276	157720	324470	813989	1614908					
	3144477						LINR	-0.06035	0.35419		0.99509
38 2,2-Dichloropropane	12299	42987	80056	169695	434157	863657					
	1661706						LINR	-0.03015	0.37563		0.99408
45 Cyclohexane	0.48843	0.41978	0.39654	0.44786	0.48172	0.51229					
	0.44958						AVRG		0.45660		8.86647

2141027005 413

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-OCT-2014 10:25
End Cal Date : 19-OCT-2014 13:00
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv8.i/2141019.s.b/8260dodw8.m
Cal Date : 31-Oct-2014 14:19 jck2

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2	
	200 Level 9											
36 Bromochloromethane	0.17529	0.13558	0.12799	0.13384	0.13431	0.13972						
	0.12192						AVRG		0.13838		12.47661	
37 Chloroform +	15148	51454	101803	207715	505908	982265						
	1912409						LINR	-0.04300	0.42952		0.99518	
35 Tetrahydrofuran	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+00		0.000e+00	<-
53 Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+00		0.000e+00	<-
46 Carbon Tetrachloride	0.34580	0.25681	0.25554	0.28799	0.30823	0.32799						
	0.29243						AVRG		0.29640		11.44289	
43 1,1,1-Trichloroethane	0.51057	0.40074	0.35810	0.39521	0.39746	0.42396						
	0.37076						AVRG		0.40811		12.24321	
33 2-Butanone	0.28486	0.21111	0.21530	0.23053	0.24738	0.24855						
	0.22164						AVRG		0.23705		10.82534	

2141027005 114

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-OCT-2014 10:25
End Cal Date : 19-OCT-2014 13:00
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv8.i/2141019.s.b/8260dodw8.m
Cal Date : 31-Oct-2014 14:19 jck2

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2	
	200 Level 9											
44 1,1-Dichloropropene	0.43319	0.33213	0.31097	0.34563	0.35880	0.38620						
	0.34095						AVRG		0.35827		11.26584	
54 2,2,4 Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+00		0.000e+00	<-
24 Propionitrile	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+00		0.000e+00	<-
30 Methylacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+00		0.000e+00	<-
47 Benzene	35841	123987	242145	494878	1238822	2406753						
	4641094						LINR	-0.04191	1.04566		0.99436	
34 Isobutyl Alcohol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+00		0.000e+00	<-
31 sec-butanol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+00		0.000e+00	<-

2141022205 415

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-OCT-2014 10:25
End Cal Date : 19-OCT-2014 13:00
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv8.i/2141019.s.b/8260dodw8.m
Cal Date : 31-Oct-2014 14:19 jck2

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2	
	200 Level 9											
42 1,2-Dichloroethane	0.52319	0.39487	0.37502	0.37659	0.38213	0.40420						
	0.35495						AVRG		0.40156		13.91092	
7 2-Chloropropene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+00		0.000e+00	<-
57 Trichloroethene	9332	31525	57826	119707	303965	582057						
	1142072						LINR	-0.03887	0.25639		0.99562	
61 Methyl Cyclohexane	0.53267	0.43952	0.42013	0.44992	0.46327	0.49382						
	0.43055						AVRG		0.46141		8.57800	
40 n-Butanol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+00		0.000e+00	<-
152 Ethyl Tert-butyl Ether	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+00		0.000e+00	<-
55 Dibromomethane	5487	19555	37294	74198	186269	364311						
	714051						LINR	-0.03582	0.16035		0.99564	

21410265 GTI

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-OCT-2014 10:25
End Cal Date : 19-OCT-2014 13:00
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv8.i/2141019.s.b/8260dodw8.m
Cal Date : 31-Oct-2014 14:19 jck2

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2	
	200 Level 9											
48 2-3 Dichloro-1-Proprene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+00		0.000e+00	<-
56 1,2-Dichloropropane +	9775	32258	64332	129130	324802	633805						
	1251516						LINR	-0.03178	0.28083		0.99611	
58 Bromodichloromethane	0.48112	0.34918	0.33481	0.35366	0.36586	0.39306						
	0.34577						AVRG		0.37478		13.45789	
52 Methyl methacrylate	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+00		0.000e+00	<-
51 1,4- Dioxane	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+00		0.000e+00	<-
60 1-Bromo-2-chloroethane	0.56264	0.43971	0.41965	0.43745	0.44397	0.47065						
	0.41779						AVRG		0.45598		11.00997	
62 2-Chloroethyl vinyl ether	0.22997	0.15426	0.21232	0.20885	0.21486	0.22237						
	0.22312						AVRG		0.20939		12.11038	

21410A2005 ITA

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-OCT-2014 10:25
End Cal Date : 19-OCT-2014 13:00
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv8.i/2141019.s.b/8260dodw8.m
Cal Date : 31-Oct-2014 14:19 jck2

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	 m1	 m2	%RSD or R^2	
	200 Level 9											
63 cis-1,3-Dichloropropene	0.53367 0.44145	0.40351	0.42076	0.44247	0.46457	0.50146	AVRG		0.45827		9.97094	
70 Toluene +	37732 4905882	130963	257385	523929	1313027	2562059	LINR	-0.04990	2.51832		0.99263	
154 Tert-butyl formate	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
49 2-Nitropropane	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
162 Heptane	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
65 4-methyl-2-pentanone	0.96144 0.85100	0.79006	0.77185	0.82180	0.91721	0.95241	AVRG		0.86654		8.93989	
78 Tetrachloroethene	0.63106 0.44796	0.50236	0.46563	0.48019	0.48883	0.52495	AVRG		0.50585		11.96238	

2141102705 119

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-OCT-2014 10:25
End Cal Date : 19-OCT-2014 13:00
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv8.i/2141019.s.b/8260dodw8.m
Cal Date : 31-Oct-2014 14:19 jck2

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2	
	200 Level 9											
66 trans-1,3-Dichloropropene	0.52606	0.38815	0.39365	0.41351	0.44617	0.47303						
	0.42400						AVRG		0.43779		11.14938	
M 87 1-3 Dichloropropene total	0.52986	0.39583	0.40721	0.42799	0.45537	0.48724						
	0.43272						AVRG		0.44803		10.51455	
64 Ethyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+00		0.000e+00	<-
67 1,1,2-Trichloroethane	8625	28427	57753	114467	291873	562634						
	1102494						LINR	-0.04383	0.56331		0.99457	
153 tert-amyl Methyl Ether	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+00		0.000e+00	<-
72 Dibromochloromethane	0.79526	0.59735	0.59325	0.59555	0.63754	0.68835						
	0.60269						AVRG		0.64428		11.63084	
71 1,3-Dichloropropane	14848	52040	103437	207022	534744	1032260						
	2031782						LINR	-0.03896	1.03826		0.99487	

2141022205 119

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-OCT-2014 10:25
End Cal Date : 19-OCT-2014 13:00
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv8.i/2141019.s.b/8260dodw8.m
Cal Date : 31-Oct-2014 14:19 jck2

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	200 Level 9	Curve	Coefficients b	m1	m2	%RSD or R^2	
155 Tert-amyl alcohol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
59 1-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
74 1,2-Dibromoethane(EDB)	0.83936	0.61251	0.57350	0.59603	0.62366	0.64839	0.56876	AVRG		0.63746		14.63545	
73 2-Hexanone	0.78765	0.60352	0.62413	0.67718	0.77576	0.80768	0.71758	AVRG		0.71336		11.39715	
86 1-Chlorohexane	1.03870	0.76473	0.73225	0.79441	0.88536	0.92294	0.84510	AVRG		0.85478		12.29453	
85 Chlorobenzene ++	24783	84487	165840	330775	828621	1621797	3131377	LINR	-0.04779	1.60399		0.99344	
88 Ethylbenzene +	12537	42713	87086	178874	457838	902202	1764848	LINR	-0.03348	0.90430		0.99439	

21410226D5 120

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-OCT-2014 10:25
End Cal Date : 19-OCT-2014 13:00
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv8.i/2141019.s.b/8260dodw8.m
Cal Date : 31-Oct-2014 14:19 jck2

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2	
	200 Level 9											
82 1,1,1,2-Tetrachloroethane	0.80506 0.54008	0.58138	0.56735	0.56757	0.58807	0.62646	AVRG		0.61085		14.66069	
89 p,m-Xylene	1.41693 1.07272	1.15800	1.14942	1.14249	1.18166	1.25706	AVRG		1.19690		9.30453	
93 o-Xylene	1.39337 1.06374	1.00352	1.02221	1.08262	1.14966	1.24050	AVRG		1.13652		12.22979	
M 120 TOTAL XYLENE	1.40908 1.06973	1.10651	1.10702	1.12254	1.17099	1.25154	AVRG		1.17677		10.04239	
157 1,3-difluorobenzene	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
91 Styrene	2.11054 1.83243	1.73652	1.79038	1.85735	1.97230	2.12195	AVRG		1.91735		8.01897	
90 Bromoform ++	0.53233 0.47018	0.42269	0.45421	0.44997	0.48931	0.52721	AVRG		0.47798		8.52963	

2141022005 121

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-OCT-2014 10:25
End Cal Date : 19-OCT-2014 13:00
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv8.i/2141019.s.b/8260dodw8.m
Cal Date : 31-Oct-2014 14:19 jck2

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2	
	200 Level 9											
158 1,4-difluorobenzene	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
81 1-3 Diethylbenzene	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
96 Isopropylbenzene	3.23640 2.76815	2.81336	2.71694	2.87022	3.01830	3.25702	AVRG		2.95434		7.48300	
79 1-4 Diethylbenzene	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
159 1,2-difluorobenzene	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
M 161 Total Difluorobenzene	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
77 1-2 Diethylbenzene	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-

2141019.S 227

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-OCT-2014 10:25
End Cal Date : 19-OCT-2014 13:00
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv8.i/2141019.s.b/8260dodw8.m
Cal Date : 31-Oct-2014 14:19 jck2

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2	
	200 Level 9											
M 121 Total Diethylbenzene	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
98 Bromobenzene	1.85928 1.29889	1.46100	1.43313	1.37401	1.41950	1.51531	AVRG		1.48016		12.19045	
100 n-Propylbenzene	4.51370 3.29052	3.58056	3.46260	3.56110	3.66463	3.93629	AVRG		3.71563		10.84948	
92 1,1,2,2-Tetrachloroethane++	1.19929 0.82118	0.85846	0.86867	0.89867	0.92270	0.96742	AVRG		0.93377		13.51604	
101 2-Chlorotoluene	3.18079 2.26501	2.42414	2.38786	2.41162	2.47997	2.65807	AVRG		2.54392		11.97404	
104 1,3,5-Trimethylbenzene	2.98919 2.39998	2.43207	2.41612	2.51846	2.58191	2.79850	AVRG		2.59089		8.62022	
76 Cyclohexanone	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-

2141022.SQ 123

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-OCT-2014 10:25
End Cal Date : 19-OCT-2014 13:00
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv8.i/2141019.s.b/8260dodw8.m
Cal Date : 31-Oct-2014 14:19 jck2

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2	
	200 Level 9											
94 1,2,3-Trichloropropane	1.44066	1.01151	1.02953	1.04729	1.11969	1.16367						
	1.02149						AVRG		1.11912		13.63333	
95 trans-1,4-Dichloro-2-Butene	0.30839	0.23069	0.22612	0.24816	0.27004	0.29094						
	0.25743						AVRG		0.26168		11.60547	
102 4-Chlorotoluene	2.85783	2.22603	2.16420	2.19383	2.26503	2.42575						
	2.05975						AVRG		2.31320		11.43617	
84 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+00		0.000e+00	<-
105 tert-butylbenzene	1.57685	1.33651	1.34524	1.38513	1.46159	1.56537						
	1.35753						AVRG		1.43260		7.21082	
106 1,2,4-Trimethylbenzene	2.77788	2.40471	2.50912	2.56537	2.68819	2.89576						
	2.45991						AVRG		2.61442		6.85397	
107 sec-Butylbenzene	3.74256	3.29888	3.23297	3.29466	3.44452	3.67229						
	3.10896						AVRG		3.39926		6.87189	

21410226D5_1124

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-OCT-2014 10:25
End Cal Date : 19-OCT-2014 13:00
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv8.i/2141019.s.b/8260dodw8.m
Cal Date : 31-Oct-2014 14:19 jck2

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	200 Level 9	Curve	Coefficients b	m1	m2	%RSD or R^2	
112 Dicyclopentadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
111 p-Isopropyltoluene	2.96127	2.60890	2.65172	2.77588	2.91038	3.15513	2.67346	AVRG		2.81954		7.04506	
108 1,3-Dichlorobenzene	21622	72250	144764	293930	727587	1444257	2779929	LINR	-0.04874	1.41620		0.99259	
99 Benzal Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
110 1,4-Dichlorobenzene	21586	77485	146300	296214	740590	1465810	2830162	LINR	-0.04857	1.44056		0.99288	
114 n-Butylbenzene	2.93202	2.35041	2.42349	2.57403	2.75788	2.98048	2.50500	AVRG		2.64619		9.36082	
160 Methyldisulfide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-

2141022505 425

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-OCT-2014 10:25
End Cal Date : 19-OCT-2014 13:00
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv8.i/2141019.s.b/8260dodw8.m
Cal Date : 31-Oct-2014 14:19 jck2

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	 m1	 m2	%RSD or R^2	
	200 Level 9											
113 1,2-Dichlorobenzene	1.89365	1.52415	1.48824	1.48443	1.49959	1.61088						
	1.36191						AVRG		1.55184		10.79831	
151 3,3 Dimethyl-1-butanol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+00		0.000e+00	<-
69 3-ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+00		0.000e+00	<-
115 1,2-Dibromo-3-Chloropropane	2987	9332	19629	42158	113819	228696						
	448040						LINR	-0.01924	0.22903		0.99373	
118 Hexachlorobutadiene	0.58733	0.54668	0.52952	0.53666	0.56410	0.61553						
	0.52212						AVRG		0.55742		6.07811	
116 1,2,4-Trichlorobenzene	1.29688	0.98909	1.01608	1.06286	1.14247	1.26066						
	1.07517						AVRG		1.12046		10.60953	
117 Naphthalene	2.76608	2.50499	2.70283	2.96139	3.43429	3.66716						
	3.10696						AVRG		3.02053		13.72870	

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-OCT-2014 10:25
End Cal Date : 19-OCT-2014 13:00
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv8.i/2141019.s.b/8260dodw8.m
Cal Date : 31-Oct-2014 14:19 jck2

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	 m1	 m2	%RSD or R^2	
	200 Level 9											
119 1,2,3-Trichlorobenzene	1.35189 1.04938	1.04229	1.05198	1.08559	1.16120	1.25311	AVRG		1.14221		10.51659	
75 2-ethyltoluene	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
103 2-methylnapthalene	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
$ 39 Dibromofluoromethane	0.23030 0.23602	0.23618	0.23023	0.23611	0.23382	0.23138	AVRG		0.23343		1.18435	
$ 41 1,2-Dichloroethane-d4	0.16504 0.16309	0.16602	0.16202	0.16415	0.16440	0.16262	AVRG		0.16390		0.86092	
$ 68 Toluene-d8	2.30886 2.26498	2.33439	2.28941	2.27687	2.30755	2.30323	AVRG		2.29790		1.00050	
$ 97 Bromofluorobenzene	0.72361 0.71709	0.72986	0.71969	0.71445	0.72716	0.71891	AVRG		0.72154		0.77063	

2141023205 1127

Data File: /var/chem/msv8.i/2141019.s.b/i1482D.d
Report Date: 31-Oct-2014 14:19

GCAL, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: 1600
Level: LOW
Data Type: MS DATA
SpikeList File: icv.spk
Sublist File: 8260b.sub
Method File: /var/chem/msv8.i/2141019.s.b/8260dodw8.m
Misc Info: MSV~31850~*1*ALC

Client SDG: 2141019.s
Fraction: VOA
Client Smp ID: V8ICV050
Operator: ALC
SampleType: LCS
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
1 Dichlorodifluoromethane	50.0	72.2	144.48*	80-120
2 Chloromethane ++	50.0	50.5	101.04	80-120
3 Vinyl Chloride +	50.0	42.9	85.77	80-120
5 Bromomethane	50.0	45.5	90.99	80-120
6 Chloroethane	50.0	44.3	88.67	80-120
9 Trichlorofluoromethane	50.0	47.6	95.29	80-120
13 1,1-Dichloroethene +	50.0	45.2	90.37	80-120
19 1,1,2Trichlotrifluoroethane	50.0	47.3	94.70	80-120
21 Carbon Disulfide	50.0	44.7	89.35	80-120
14 Methyl Iodide	50.0	49.7	99.40	80-120
8 Acrolein	250	289	115.73	80-120
18 Methylene Chloride	50.0	46.0	92.08	80-120
11 Acetone	50.0	41.7	83.43	80-120
20 Methyl Acetate	50.0	49.4	98.79	80-120
22 trans-1,2-Dichloroethene	50.0	47.0	94.05	80-120
25 MTBE	50.0	46.5	92.94	80-120
26 1,1-Dichloroethane ++	50.0	44.8	89.53	80-120
16 Acrylonitrile	250	264	105.75	80-120
29 Vinyl Acetate	50.0	42.9	85.77	80-120
23 cis-1,2-Dichloroethene	50.0	46.3	92.60	80-120
38 2,2-Dichloropropane	50.0	46.4	92.77	80-120
36 Bromochloromethane	50.0	43.2	86.33	80-120
45 Cyclohexane	50.0	50.3	100.50	80-120
37 Chloroform +	50.0	47.8	95.54	80-120
46 Carbon Tetrachloride	50.0	47.4	94.75	80-120
43 1,1,1-Trichloroethane	50.0	44.9	89.72	80-120
33 2-Butanone	50.0	46.6	93.26	80-120
44 1,1-Dichloropropene	50.0	44.5	89.07	80-120
47 Benzene	50.0	47.8	95.53	80-120
42 1,2-Dichloroethane	50.0	45.4	90.77	80-120
57 Trichloroethene	50.0	47.9	95.80	80-120
61 Methyl Cyclohexane	50.0	47.3	94.69	80-120
55 Dibromomethane	50.0	48.1	96.24	80-120

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
56 1,2-Dichloropropane +	50.0	48.8	97.65	80-120
58 Bromodichloromethane	50.0	47.3	94.65	80-120
62 2-Chloroethyl vinyl ether	50.0	41.8	83.57	80-120
63 cis-1,3-Dichloropropene	50.0	48.8	97.62	80-120
70 Toluene +	50.0	48.6	97.22	80-120
65 4-methyl-2-pentanone	50.0	51.3	102.57	80-120
78 Tetrachloroethene	50.0	45.8	91.64	80-120
66 trans-1,3-Dichloropropene	50.0	47.9	95.87	80-120
67 1,1,2-Trichloroethane	50.0	50.3	100.67	80-120
72 Dibromochloromethane	50.0	48.9	97.85	80-120
71 1,3-Dichloropropane	50.0	50.9	101.73	80-120
74 1,2-Dibromoethane(EDB)	50.0	46.4	92.86	80-120
73 2-Hexanone	50.0	53.1	106.21	80-120
86 1-Chlorohexane	50.0	48.0	96.04	80-120
85 Chlorobenzene ++	50.0	49.7	99.36	80-120
88 Ethylbenzene +	50.0	47.9	95.85	80-120
82 1,1,1,2-Tetrachloroethane	50.0	46.2	92.49	80-120
89 p,m-Xylene	100	93.9	93.93	80-120
93 o-Xylene	50.0	48.7	97.31	80-120
91 Styrene	50.0	50.2	100.40	80-120
90 Bromoform ++	50.0	49.9	99.82	80-120
96 Isopropylbenzene	50.0	48.3	96.62	80-120
98 Bromobenzene	50.0	46.8	93.57	80-120
100 n-Propylbenzene	50.0	48.3	96.52	80-120
92 1,1,2,2-Tetrachloroethane++	50.0	46.4	92.85	80-120
101 2-Chlorotoluene	50.0	46.2	92.40	80-120
104 1,3,5-Trimethylbenzene	50.0	48.3	96.52	80-120
94 1,2,3-Trichloropropane	50.0	48.9	97.80	80-120
95 trans-1,4-Dichloro-2-Butene	50.0	53.8	107.60	80-120
102 4-Chlorotoluene	50.0	48.6	97.25	80-120
105 tert-butylbenzene	50.0	48.9	97.80	80-120
106 1,2,4-Trimethylbenzene	50.0	50.0	99.93	80-120
107 sec-Butylbenzene	50.0	47.9	95.82	80-120
111 p-Isopropyltoluene	50.0	50.3	100.57	80-120
108 1,3-Dichlorobenzene	50.0	49.8	99.62	80-120
110 1,4-Dichlorobenzene	50.0	49.9	99.72	80-120
114 n-Butylbenzene	50.0	51.5	103.10	80-120
113 1,2-Dichlorobenzene	50.0	48.6	97.12	80-120
115 1,2-Dibromo-3-Chloropropane	50.0	45.8	91.55	80-120
118 Hexachlorobutadiene	50.0	47.5	94.98	80-120
117 Naphthalene	50.0	53.9	107.80	80-120
116 1,2,4-Trichlorobenzene	50.0	51.4	102.85	80-120
119 1,2,3-Trichlorobenzene	50.0	49.1	98.17	80-120

Data File: /var/chem/msv8.i/2141030p.s.b/i1823.d
Report Date: 31-Oct-2014 13:42

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msv8.i
Lab File ID: i1823.d
Analysis Type: WATER
Lab Sample ID: 1400
Method: /var/chem/msv8.i/2141030p.s.b/8260dodw8.m

Injection Date: 30-OCT-2014 22:03
Init. Cal. Date(s): 19-OCT-2014 19-OCT-2014
Init. Cal. Times: 10:25 13:00
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
1 Dichlorodifluoromethane	0.20107	0.18478	0.18478	0.000	-8.09925	20.00000	Averaged	
2 Chloromethane ++	49.13424	50.00000	0.32354	0.100	-1.73151	20.00000	Linear	
3 Vinyl Chloride +	0.29400	0.28734	0.28734	0.000	-2.26455	20.00000	Averaged	
5 Bromomethane	44.33451	50.00000	0.12919	0.000	-11.33099	20.00000	Linear	
6 Chloroethane	51.54527	50.00000	0.16572	0.050	3.09054	20.00000	Linear	
9 Trichlorofluoromethane	0.36471	0.32971	0.32971	0.000	-9.59649	20.00000	Averaged	
13 1,1-Dichloroethene +	0.22871	0.19380	0.19380	0.000	-15.26128	20.00000	Averaged	
19 1,1,2Trichlotrifluoroethane	0.22687	0.19820	0.19820	0.000	-12.63790	20.00000	Averaged	
21 Carbon Disulfide	0.76611	0.66624	0.66624	0.000	-13.03691	20.00000	Averaged	
14 Methyl Iodide	0.24962	0.19730	0.19730	0.000	-20.96306	20.00000	Averaged	<-NT
8 Acrolein	0.02378	0.03220	0.03220	0.000	35.38905	20.00000	Averaged	<-NT
18 Methylene Chloride	48.42916	50.00000	0.36000	0.000	-3.14169	20.00000	Linear	
11 Acetone	0.16244	0.17238	0.17238	0.000	6.12124	20.00000	Averaged	
20 Methyl Acetate	0.31112	0.29416	0.29416	0.050	-5.45148	20.00000	Averaged	
22 trans-1,2-Dichloroethene	47.09316	50.00000	0.33679	0.000	-5.81368	20.00000	Linear	
32 Hexane	0.42246	0.41633	0.41633	0.050	-1.45193	20.00000	Averaged	
25 MTBE	0.86478	0.77559	0.77559	0.000	-10.31360	20.00000	Averaged	
26 1,1-Dichloroethane ++	0.52047	0.45309	0.45309	0.100	-12.94583	20.00000	Averaged	
16 Acrylonitrile	0.11390	0.11257	0.11257	0.000	-1.16423	20.00000	Averaged	
29 Vinyl Acetate	61.50666	50.00000	0.24183	0.000	23.01332	20.00000	Linear	<-NT
23 cis-1,2-Dichloroethene	46.76145	50.00000	0.34938	0.000	-6.47710	20.00000	Linear	
M 80 Total 1,2-Dichloroethene	93.85461	100	0.34308	0.000	-6.14539	20.00000	Linear	
38 2,2-Dichloropropane	46.26841	50.00000	0.35892	0.000	-7.46319	20.00000	Linear	
36 Bromochloromethane	0.13838	0.11414	0.11414	0.000	-17.51607	20.00000	Averaged	
45 Cyclohexane	0.45660	0.42905	0.42905	0.000	-6.03433	20.00000	Averaged	
37 Chloroform +	46.28767	50.00000	0.41610	0.000	-7.42467	20.00000	Linear	
46 Carbon Tetrachloride	0.29640	0.26990	0.26990	0.000	-8.94187	20.00000	Averaged	
$ 39 Dibromofluoromethane	0.23343	0.22418	0.22418	0.000	-3.96608	20.00000	Averaged	
43 1,1,1-Trichloroethane	0.40811	0.35297	0.35297	0.000	-13.51150	20.00000	Averaged	
33 2-Butanone	0.23705	0.23559	0.23559	0.000	-0.61837	20.00000	Averaged	
44 1,1-Dichloropropene	0.35827	0.32610	0.32610	0.000	-8.97957	20.00000	Averaged	
47 Benzene	46.19093	50.00000	1.00982	0.000	-7.61814	20.00000	Linear	
$ 41 1,2-Dichloroethane-d4	0.16390	0.17061	0.17061	0.000	4.09134	20.00000	Averaged	
42 1,2-Dichloroethane	0.40156	0.36196	0.36196	0.000	-9.86271	20.00000	Averaged	
57 Trichloroethene	45.50756	50.00000	0.24332	0.000	-8.98488	20.00000	Linear	

Data File: /var/chem/msv8.i/2141030p.s.b/i1823.d
Report Date: 31-Oct-2014 13:42

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msv8.i
Lab File ID: i1823.d
Analysis Type: WATER
Lab Sample ID: 1400
Method: /var/chem/msv8.i/2141030p.s.b/8260dodw8.m

Injection Date: 30-OCT-2014 22:03
Init. Cal. Date(s): 19-OCT-2014 19-OCT-2014
Init. Cal. Times: 10:25 13:00
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
61 Methyl Cyclohexane	0.46141	0.40262	0.40262	0.050	-12.74164	20.00000	Averaged
55 Dibromomethane	44.15564	50.00000	0.14735	0.000	-11.68871	20.00000	Linear
56 1,2-Dichloropropane +	46.01325	50.00000	0.26737	0.000	-7.97350	20.00000	Linear
58 Bromodichloromethane	0.37478	0.32533	0.32533	0.000	-13.19473	20.00000	Averaged
60 1-Bromo-2-chloroethane	0.45598	0.40177	0.40177	0.005	-11.88791	20.00000	Averaged
62 2-Chloroethyl vinyl ether	0.20939	0.14305	0.14305	0.000	-31.68290	20.00000	Averaged <-NT
63 cis-1,3-Dichloropropene	0.45827	0.41168	0.41168	0.000	-10.16724	20.00000	Averaged
$ 68 Toluene-d8	2.29790	2.28156	2.28156	0.000	-0.71129	20.00000	Averaged
70 Toluene +	45.09382	50.00000	2.39687	0.000	-9.81236	20.00000	Linear
65 4-methyl-2-pentanone	0.86654	0.83261	0.83261	0.000	-3.91529	20.00000	Averaged
78 Tetrachloroethene	0.50585	0.41544	0.41544	0.000	-17.87298	20.00000	Averaged
66 trans-1,3-Dichloropropene	0.43779	0.38664	0.38664	0.000	-11.68392	20.00000	Averaged
M 87 1-3 Dichloropropene total	0.44803	0.39916	0.39916	0.050	-10.90825	20.00000	Averaged
67 1,1,2-Trichloroethane	45.21596	50.00000	0.53410	0.000	-9.56808	20.00000	Linear
72 Dibromochloromethane	0.64428	0.53701	0.53701	0.000	-16.65048	20.00000	Averaged
71 1,3-Dichloropropane	45.85972	50.00000	0.99274	0.000	-8.28056	20.00000	Linear
74 1,2-Dibromoethane(EDB)	0.63746	0.53284	0.53284	0.000	-16.41169	20.00000	Averaged
73 2-Hexanone	0.71336	0.72111	0.72111	0.000	1.08653	20.00000	Averaged
86 1-Chlorohexane	0.85478	0.74188	0.74188	0.050	-13.20812	20.00000	Averaged
85 Chlorobenzene ++	44.82109	50.00000	1.51451	0.300	-10.35782	20.00000	Linear
88 Ethylbenzene +	44.50212	50.00000	0.83515	0.000	-10.99576	20.00000	Linear
82 1,1,1,2-Tetrachloroethane	0.61085	0.50583	0.50583	0.000	-17.19252	20.00000	Averaged
89 p,m-Xylene	1.19690	1.02013	1.02013	0.000	-14.76865	20.00000	Averaged
93 o-Xylene	1.13652	0.98694	0.98694	0.000	-13.16083	20.00000	Averaged
M 120 TOTAL XYLENE	1.17677	1.00907	1.00907	0.000	-14.25104	20.00000	Averaged
91 Styrene	1.91735	1.71156	1.71156	0.000	-10.73301	20.00000	Averaged
90 Bromoform ++	0.47798	0.38676	0.38676	0.100	-19.08444	20.00000	Averaged
96 Isopropylbenzene	2.95434	2.62784	2.62784	0.000	-11.05172	20.00000	Averaged
$ 97 Bromofluorobenzene	0.72154	0.68242	0.68242	0.000	-5.42175	20.00000	Averaged
98 Bromobenzene	1.48016	1.31258	1.31258	0.000	-11.32174	20.00000	Averaged
100 n-Propylbenzene	3.71563	3.31460	3.31460	0.000	-10.79289	20.00000	Averaged
92 1,1,2,2-Tetrachloroethane++	0.93377	0.74938	0.74938	0.300	-19.74714	20.00000	Averaged
101 2-Chlorotoluene	2.54392	2.26400	2.26400	0.000	-11.00346	20.00000	Averaged
104 1,3,5-Trimethylbenzene	2.59089	2.33652	2.33652	0.000	-9.81770	20.00000	Averaged
94 1,2,3-Trichloropropane	1.11912	0.95228	0.95228	0.000	-14.90813	20.00000	Averaged

Data File: /var/chem/msv8.i/2141030p.s.b/i1823.d
Report Date: 31-Oct-2014 13:42

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msv8.i
Lab File ID: i1823.d
Analysis Type: WATER
Lab Sample ID: 1400
Method: /var/chem/msv8.i/2141030p.s.b/8260dodw8.m

Injection Date: 30-OCT-2014 22:03
Init. Cal. Date(s): 19-OCT-2014 19-OCT-2014
Init. Cal. Times: 10:25 13:00
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
95 trans-1,4-Dichloro-2-Butene	0.26168	0.22950	0.22950	0.000	-12.29914	20.00000	Averaged
102 4-Chlorotoluene	2.31320	2.06272	2.06272	0.000	-10.82838	20.00000	Averaged
105 tert-butylbenzene	1.43260	1.32818	1.32818	0.000	-7.28897	20.00000	Averaged
106 1,2,4-Trimethylbenzene	2.61442	2.43006	2.43006	0.000	-7.05178	20.00000	Averaged
107 sec-Butylbenzene	3.39926	3.17385	3.17385	0.000	-6.63130	20.00000	Averaged
111 p-Isopropyltoluene	2.81954	2.61521	2.61521	0.000	-7.24671	20.00000	Averaged
108 1,3-Dichlorobenzene	45.93962	50.00000	1.37022	0.000	-8.12076	20.00000	Linear
110 1,4-Dichlorobenzene	45.97005	50.00000	1.39442	0.000	-8.05990	20.00000	Linear
114 n-Butylbenzene	2.64619	2.48554	2.48554	0.000	-6.07100	20.00000	Averaged
113 1,2-Dichlorobenzene	1.55184	1.33746	1.33746	0.000	-13.81458	20.00000	Averaged
115 1,2-Dibromo-3-Chloropropane	43.99198	50.00000	0.20592	0.000	-12.01604	20.00000	Linear
118 Hexachlorobutadiene	0.55742	0.48790	0.48790	0.000	-12.47167	20.00000	Averaged
116 1,2,4-Trichlorobenzene	1.12046	1.07746	1.07746	0.000	-3.83760	20.00000	Averaged
117 Naphthalene	3.02053	3.11548	3.11548	0.000	3.14362	20.00000	Averaged
119 1,2,3-Trichlorobenzene	1.14221	1.06053	1.06053	0.000	-7.15053	20.00000	Averaged

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-OCT-2014 15:25
End Cal Date : 24-OCT-2014 14:03
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv9.i/2141024.s.b/8260dodw9.m
Cal Date : 25-Oct-2014 18:12 clh

Calibration File Names:
Level 3: /var/chem/msv9.i/2141023p.s.b/j4980d.d
Level 4: /var/chem/msv9.i/2141023p.s.b/j4981d.d
Level 5: /var/chem/msv9.i/2141023p.s.b/j4982d.d
Level 6: /var/chem/msv9.i/2141023p.s.b/j4983d.d
Level 7: /var/chem/msv9.i/2141023p.s.b/j4984d.d
Level 8: /var/chem/msv9.i/2141023p.s.b/j4985d.d
Level 9: /var/chem/msv9.i/2141023p.s.b/j4986d.d

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2
	200 Level 9										
1 Dichlorodifluoromethane	0.24155	0.24948	0.21824	0.24893	0.24102	0.22575					
	0.22843						AVRG		0.23620		5.13318
2 Chloromethane ++	3235	8431	15239	32812	84557	155676					
	326249						LINR	-0.02220	0.31562		0.99927
3 Vinyl Chloride +	2150	7437	14297	31590	81026	161753					
	333514						LINR	0.00163	0.32504		0.99989
5 1-3 Butadiene	0.34286	0.28236	0.26736	0.26881	0.25620	0.25171					
	0.24106						AVRG		0.27291		12.31232

2141023_133

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-OCT-2014 15:25
End Cal Date : 24-OCT-2014 14:03
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv9.i/2141024.s.b/8260dodw9.m
Cal Date : 25-Oct-2014 18:12 clh

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2	
	200 Level 9											
6 Bromomethane	1254	4065	8215	15444	38116	79859	LINR	-0.00110	0.15990		0.99975	
	164502											
7 Chloroethane	1691	5557	9821	21030	50980	101119	LINR	-0.05619	0.18634		0.99862	
	190475											
8 Trichlorofluoromethane	0.47802	0.41757	0.38909	0.43239	0.41538	0.40020	AVRG		0.42043		6.85575	
	0.41039											
9 Ethyl Ether	0.28597	0.29389	0.28866	0.29050	0.28282	0.29329	AVRG		0.28963		1.41116	
	0.29231											
4 2-Chloropropene	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
	+++++											
10 1,1-Dichloroethene +	1649	5170	10353	21899	54937	109293	LINR	-0.00466	0.21959		0.99986	
	225827											
12 1,1,2Trichlotrifluoroethane	0.21505	0.24535	0.22660	0.24554	0.24106	0.22773	AVRG		0.23305		4.87557	
	0.22999											

21410225 LCT

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-OCT-2014 15:25
End Cal Date : 24-OCT-2014 14:03
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv9.i/2141024.s.b/8260dodw9.m
Cal Date : 25-Oct-2014 18:12 clh

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	200 Level 9	Curve	Coefficients b	m1	m2	%RSD or R^2
11 Carbon Disulfide	6121	18749	35109	74454	188537	380311	794459	LINR	0.00394	0.77229		0.99972
13 Methyl Iodide	+++++	1334	2620	7840	32145	90313	236022	QUAD	0.14998	6.06571	-2.05852	0.99798
14 Acrolein	0.03789	0.03247	0.03168	0.03660	0.03797	0.03620	0.03607	AVRG		0.03555		7.03969
15 Allyl chloride	0.28557	0.32206	0.30667	0.31116	0.31697	0.35059	0.35160	AVRG		0.32066		7.40792
16 Methylene Chloride	4144	11580	21026	43453	104637	213002	437685	LINR	-0.01290	0.42457		0.99985
17 Acetone	0.30933	0.25668	0.23142	0.26665	0.24786	0.23465	0.25401	AVRG		0.25723		10.13476
18 trans-1,2-Dichloroethene	2594	8632	17111	36724	96897	198218	414300	LINR	0.01776	0.40422		0.99973

2141025.S 135

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-OCT-2014 15:25
End Cal Date : 24-OCT-2014 14:03
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv9.i/2141024.s.b/8260dodw9.m
Cal Date : 25-Oct-2014 18:12 clh

Compound	1 Level 3 / 200 Level 9	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2	
19 Methyl Acetate	0.72574 0.61732	0.56305	0.51484	0.61160	0.61295	0.59129	AVRG		0.60525		10.64645	
20 Hexane	1107 403419	7021	13316	33392	95597	198757	LINR	0.03201	0.39768		0.99987	
168 Ethanol	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
21 MTBE	0.76085 0.91306	0.74508	0.73221	0.84276	0.87131	0.87640	AVRG		0.82024		8.87700	
22 tert-Butyl Alcohol	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
23 Acetonitrile	0.04118 0.05583	0.05860	0.06202	0.06420	0.05941	0.05803	AVRG		0.05704		13.16205	
24 Isopropyl Ether	3338 1110102	17055	35972	86333	244940	547308	LINR	0.04567	1.08166		0.99948	

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-OCT-2014 15:25
End Cal Date : 24-OCT-2014 14:03
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv9.i/2141024.s.b/8260dodw9.m
Cal Date : 25-Oct-2014 18:12 clh

	Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	 m1	 m2	%RSD or R^2
		200 Level 9										
	25 Chloroprene	1134 465835	7130	17240	37680	102791	225525	LINR	0.04152	0.45177		0.99971
	26 1,1-Dichloroethane ++	3941 545449	12599	23349	50195	129362	264691	LINR	0.00596	0.53178		0.99988
	27 Acrylonitrile	0.10262 0.13080	0.11765	0.11185	0.13582	0.13157	0.12731	AVRG		0.12252		9.90536
	28 Vinyl Acetate	0.12740 0.17750	0.16032	0.17352	0.18648	0.20306	0.19082	AVRG		0.17416		14.17015
	29 cis-1,2-Dichloroethene	2311 435174	8219	16340	37024	97526	207042	LINR	0.03449	0.42579		0.99952
M	75 Total 1,2-Dichloroethene	4905 849474	16851	33451	73748	194423	405260	LINR	0.05265	0.41500		0.99964
	30 2,2-Dichloropropane	2709 415321	9652	17299	38538	101392	205992	LINR	-0.00026	0.40619		0.99996

141 20141025 12

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-OCT-2014 15:25
End Cal Date : 24-OCT-2014 14:03
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv9.i/2141024.s.b/8260dodw9.m
Cal Date : 25-Oct-2014 18:12 clh

Compound	1 Level 3 / 200 Level 9	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2	
32 Cyclohexane	1206 500282	7106	15608	40578	116228	240845	LINR	0.04470	0.49278		0.99980	
34 Bromochloromethane	0.17045 0.13675	0.16376	0.14880	0.15981	0.14876	0.14360	AVRG		0.15313		7.79286	
35 Chloroform +	3454 523390	12616	23915	49450	125797	252989	LINR	-0.00081	0.50914		0.99986	
37 Ethyl Acetate	0.32640 0.45199	0.37871	0.42905	0.46126	0.45576	0.45558	AVRG		0.42268		12.12811	
166 Ethyl Tert-butyl Ether	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
42 sec-butanol	+++++ 28345	542	1435	3761	7830	15653	LINR	-0.09180	0.02739		0.99434	<-
36 Carbon Tetrachloride	0.48729 0.38383	0.37523	0.33215	0.37619	0.37780	0.37432	AVRG		0.38669		12.30147	

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-OCT-2014 15:25
End Cal Date : 24-OCT-2014 14:03
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv9.i/2141024.s.b/8260dodw9.m
Cal Date : 25-Oct-2014 18:12 clh

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2
	200 Level 9										
41 1,1,1-Trichloroethane	0.59459	0.42196	0.40463	0.43304	0.42589	0.42563					
	0.43241						AVRG		0.44831		14.54315
44 2-Butanone	0.20423	0.22425	0.22393	0.27855	0.27430	0.26388					
	0.28942						AVRG		0.25122		13.18101
43 1,1-Dichloropropene	0.35283	0.29429	0.29176	0.35397	0.37485	0.37878					
	0.39449						AVRG		0.34871		11.66801
45 2,2,4 Trimethylpentane	2436	15720	34782	77792	209226	449779					
	908980						LINR	0.02509	0.88190		0.99979
46 Benzene	1.56144	1.12496	1.05082	1.15474	1.13988	1.14534					
	1.17804						AVRG		1.19360		13.99285
47 Propionitrile	0.05224	0.06210	0.06591	0.06508	0.06146	0.05934					
	0.05775						AVRG		0.06056		7.71096
48 Methylacrylonitrile	844	4976	11179	27495	69602	143924					
	277430						LINR	-0.00772	0.26999		0.99877

2141023205 139

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-OCT-2014 15:25
End Cal Date : 24-OCT-2014 14:03
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv9.i/2141024.s.b/8260dodw9.m
Cal Date : 25-Oct-2014 18:12 clh

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	200 Level 9	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2	
52 Isobutyl Alcohol	145	1626	4332	9304	20862	42590	83567	LINR	-0.13470	0.01611		0.99918	<-
51 1,2-Dichloroethane	0.50274	0.46738	0.43351	0.45191	0.43644	0.43389	0.44397	AVRG		0.45284		5.54489	
55 Methyl Cyclohexane	0.32059	0.36768	0.35968	0.41431	0.44400	0.44277	0.45895	AVRG		0.40114		13.03796	
56 Trichloroethene	1957	6941	13267	29130	74411	151204	311811	LINR	0.00601	0.30407		0.99989	
39 1,3-difluorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
167 Tert-butyl formate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
33 n-Butanol	+++++	0.03996	0.04302	0.04994	0.04600	0.05114	0.05016	AVRG		0.04670		9.65124	<-

2141022205 140

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-OCT-2014 15:25
End Cal Date : 24-OCT-2014 14:03
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv9.i/2141024.s.b/8260dodw9.m
Cal Date : 25-Oct-2014 18:12 clh

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2	
	200 Level 9											
57 Dibromomethane	0.22543	0.21217	0.19371	0.19709	0.19070	0.19330						
	0.20068						AVRG		0.20187		6.23423	
58 2-3 Dichloro-1-Proprene	0.38435	0.36409	0.36343	0.42419	0.43726	0.47439						
	0.46126						AVRG		0.41557		10.95498	
59 1,2-Dichloropropane +	0.40052	0.29251	0.27958	0.29896	0.30354	0.30462						
	0.31795						AVRG		0.31395		12.72169	
60 Bromodichloromethane	0.51599	0.42426	0.38474	0.41148	0.40120	0.41209						
	0.42464						AVRG		0.42491		9.99240	
61 Methyl methacrylate	1017	5651	12888	30802	85033	187057						
	396067						LINR	0.05661	0.38390		0.99947	
62 1,4- Dioxane	+++++	1032	3379	7708	19007	39667						
	73660						LINR	-0.75553	0.00287		0.99673	<-
49 1,4-difluorobenzene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+00		0.000e+00	<-

2141024295 141

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-OCT-2014 15:25
End Cal Date : 24-OCT-2014 14:03
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv9.i/2141024.s.b/8260dodw9.m
Cal Date : 25-Oct-2014 18:12 clh

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	 m1	 m2	%RSD or R^2	
	200 Level 9											
65 1-Bromo-2-chloroethane	0.50606	0.45505	0.41749	0.45205	0.45414	0.45256						
	0.47907						AVRG		0.45949		5.93873	
64 2-Chloroethyl vinyl ether	+++++	+++++	5248	15565	47170	102037						
	229264						LINR	0.14736	0.22989		0.99844	<-
67 cis-1,3-Dichloropropene	0.45307	0.40138	0.38451	0.46397	0.49143	0.50480						
	0.52468						AVRG		0.46055		11.34351	
164 tert-amyl Methyl Ether	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+00		0.000e+00	<-
38 Tetrahydrofuran	0.11651	0.13790	0.15381	0.16890	0.16785	0.16323						
	0.15960						AVRG		0.15254		12.49643	
165 Tert-amyl alcohol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+00		0.000e+00	<-
69 Toluene +	8099	28766	54651	117870	303296	620985						
	1289570						LINR	-0.00292	2.61721		0.99996	

2141025.s 142

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-OCT-2014 15:25
End Cal Date : 24-OCT-2014 14:03
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv9.i/2141024.s.b/8260dodw9.m
Cal Date : 25-Oct-2014 18:12 clh

Compound	1 Level 3 / 200 Level 9	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2	
31 Heptane	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
81 2-Nitropropane	0.32787 0.28883	0.26122	0.25739	0.31118	0.29614	0.30482	AVRG		0.29249		8.81620	
54 1,2-difluorobenzene	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
73 4-methyl-2-pentanone	0.84840 1.01714	0.76738	0.70624	0.84523	0.90213	0.92153	AVRG		0.85829		11.92036	
71 Tetrachloroethene	1384 236523	4969	9648	21805	58069	115242	LINR	-0.00806	0.48121		0.99982	
74 trans-1,3-Dichloropropene	0.44512 0.52154	0.41983	0.39516	0.45944	0.48265	0.49846	AVRG		0.46032		9.64130	
M 82 1-3 Dichloropropene total	0.44909 0.52311	0.41060	0.38983	0.46171	0.48704	0.50163	AVRG		0.46043		10.46508	

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-OCT-2014 15:25
End Cal Date : 24-OCT-2014 14:03
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv9.i/2141024.s.b/8260dodw9.m
Cal Date : 25-Oct-2014 18:12 clh

Compound	1 Level 3 / 200 Level 9	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
77 Ethyl Methacrylate	923 389086	5153	11038	26139	78411	177772	LINR	0.07770	0.88431		0.99873
76 1,1,2-Trichloroethane	0.73633 0.59392	0.67425	0.59573	0.60817	0.59423	0.59938	AVRG		0.62886		8.81180
78 Dibromochloromethane	0.76473 0.69400	0.67317	0.62379	0.64871	0.66042	0.68849	AVRG		0.67904		6.58845
79 1,3-Dichloropropane	1.20389 1.10572	1.10611	0.99721	1.05148	1.07841	1.08860	AVRG		1.09020		5.76571
70 1-Nitropropane	0.18765 0.16111	0.12628	0.14303	0.17522	0.17061	0.17051	AVRG		0.16206		12.88417
80 1,2-Dibromoethane(EDB)	0.73025 0.63522	0.60113	0.57428	0.61627	0.61618	0.61505	AVRG		0.62691		7.85536
66 3-ethyltoluene	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00 <-

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-OCT-2014 15:25
End Cal Date : 24-OCT-2014 14:03
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv9.i/2141024.s.b/8260dodw9.m
Cal Date : 25-Oct-2014 18:12 clh

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2
	200 Level 9										
83 2-Hexanone	1035	5658	11403	29538	89081	178873	LINR	0.07338	0.84455		0.99789
	415110										
86 1-Chlorohexane	1410	5455	11019	31028	88162	180243	LINR	0.06203	0.82760		0.99881
	406266										
85 Chlorobenzene ++	5199	19840	37265	79113	203234	416035	LINR	-0.00965	1.73317		0.99990
	853373										
87 Ethylbenzene +	1.13847	0.90804	0.85482	0.92029	0.92136	0.94201	AVRG		0.94568		9.47873
	0.93476										
88 1,1,1,2-Tetrachloroethane	0.82153	0.64740	0.58143	0.59443	0.58807	0.60821	AVRG		0.63644		13.27166
	0.61402										
63 Methyldisulfide	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00 <-
	+++++										
89 p,m-Xylene	1.32179	1.02831	0.99977	1.12809	1.14030	1.14847	AVRG		1.13049		9.19364
	1.14668										

2141102205 145

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-OCT-2014 15:25
End Cal Date : 24-OCT-2014 14:03
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv9.i/2141024.s.b/8260dodw9.m
Cal Date : 25-Oct-2014 18:12 clh

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	200 Level 9	Curve	Coefficients b	m1	m2	%RSD or R^2	
72 2-ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
90 o-Xylene	1.08421	0.86792	0.86516	0.96761	1.05741	1.10878	1.11106	AVRG		1.00888		10.75796	
M 121 TOTAL XYLENE	1.24260	0.97485	0.95490	1.07460	1.11267	1.13524	1.13480	AVRG		1.08995		9.14438	
91 Styrene	1.61364	1.49756	1.52701	1.81135	1.87459	1.93645	1.95068	AVRG		1.74447		11.12914	
92 Bromoform ++	0.76726	0.54617	0.51526	0.53836	0.54733	0.55318	0.56810	AVRG		0.57652		14.85037	
93 Isopropylbenzene	2.70039	2.22989	2.26735	2.63157	2.82810	2.90693	2.94712	AVRG		2.64448		11.04189	
163 3,3 Dimethyl-1-butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-

2141024S.148

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-OCT-2014 15:25
End Cal Date : 24-OCT-2014 14:03
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv9.i/2141024.s.b/8260dodw9.m
Cal Date : 25-Oct-2014 18:12 clh

Compound	1 Level 3 / 200 Level 9	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2
96 Bromobenzene	1.94647 1.52098	1.47452	1.32527	1.43747	1.43889	1.47572	AVRG		1.51705		13.10504
97 n-Propylbenzene	4.28697 3.76458	3.40416	3.14250	3.42994	3.64326	3.64266	AVRG		3.61630		9.95386
98 1,1,2,2-Tetrachloroethane++	1.01995 0.96377	1.04348	0.92518	0.98507	0.98361	0.94377	AVRG		0.98069		4.21312
99 2-Chlorotoluene	2.81810 2.57564	2.30224	2.17756	2.39247	2.46643	2.49210	AVRG		2.46065		8.32695
102 1,3,5-Trimethylbenzene	2.33012 2.64388	2.03179	2.05241	2.38967	2.55123	2.56640	AVRG		2.36650		10.40181
100 1,2,3-Trichloropropane	1.07088 1.15823	1.07034	0.97651	1.11470	1.14413	1.09054	AVRG		1.08933		5.53654
101 trans-1,4-Dichloro-2-Butene	0.24424 0.28413	0.24513	0.22804	0.26240	0.28374	0.25365	AVRG		0.25733		8.14090

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-OCT-2014 15:25
End Cal Date : 24-OCT-2014 14:03
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv9.i/2141024.s.b/8260dodw9.m
Cal Date : 25-Oct-2014 18:12 clh

Compound	1 Level 3 / 200 Level 9	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2
103 Cyclohexanone	429 203495	2853	8039	18584	47371	97667	LINR	0.04689	0.22746		0.99989
104 4-Chlorotoluene	2.56398 2.29162	2.08138	2.00575	2.12347	2.24486	2.25866	AVRG		2.22424		8.20576
105 tert-butylbenzene	1.43871 1.46544	1.16864	1.14641	1.34280	1.42192	1.41700	AVRG		1.34299		9.84574
106 Pentachloroethane	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
107 1,2,4-Trimethylbenzene	2.11555 2.68811	1.93166	2.03071	2.39321	2.58578	2.62609	AVRG		2.33873		13.28302
108 sec-Butylbenzene	2.80772 3.32337	2.69343	2.73882	3.06116	3.23886	3.26640	AVRG		3.01854		8.90073
109 Dicyclopentadiene	4372 1519795	21026	45608	119545	333558	739866	LINR	0.04972	3.42612		0.99969

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-OCT-2014 15:25
End Cal Date : 24-OCT-2014 14:03
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv9.i/2141024.s.b/8260dodw9.m
Cal Date : 25-Oct-2014 18:12 clh

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2
	200 Level 9										
110 p-Isopropyltoluene	2.20801	2.00686	2.05348	2.46046	2.71693	2.73570					
	2.81051						AVRG		2.42742		13.98587
113 1,3-Dichlorobenzene	2.02260	1.52661	1.44748	1.49466	1.51543	1.51406					
	1.52205						AVRG		1.57756		12.55649
115 1,4-Dichlorobenzene	4740	16846	33322	70708	181112	364660					
	744101						LINR	-0.00864	1.56026		0.99997
117 n-Butylbenzene	2.68214	1.98442	1.95540	2.26734	2.53501	2.55629					
	2.64263						AVRG		2.37475		12.91785
118 1,2-Dichlorobenzene	1.80259	1.44449	1.39456	1.47331	1.48567	1.49144					
	1.50900						AVRG		1.51444		8.75073
94 2-methylnapthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00 <-
119 1,2-Dibromo-3-Chloropropane	0.20023	0.20228	0.17307	0.21097	0.21949	0.21763					
	0.24666						AVRG		0.21005		10.66674

2141025S 149

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-OCT-2014 15:25
End Cal Date : 24-OCT-2014 14:03
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv9.i/2141024.s.b/8260dodw9.m
Cal Date : 25-Oct-2014 18:12 clh

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2	
	200 Level 9											
123 Benzal Chloride	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
120 Hexachlorobutadiene	0.54038 0.48511	0.44452	0.42230	0.43358	0.46851	0.47109	AVRG		0.46650		8.46235	
122 1,2,4-Trichlorobenzene	1.04863 1.16800	0.82560	0.80432	0.92623	1.05512	1.10919	AVRG		0.99101		14.21856	
124 Naphthalene	3306 1637910	19278	40475	111655	350684	746899	LINR	0.07922	3.47120		0.99886	
125 1,2,3-Trichlorobenzene	1335 554424	9237	18496	44409	125177	264813	LINR	0.04087	1.17196		0.99980	
112 1-3 Diethylbenzene	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
111 1-4 Diethylbenzene	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-

2141025.s 150

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-OCT-2014 15:25
End Cal Date : 24-OCT-2014 14:03
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv9.i/2141024.s.b/8260dodw9.m
Cal Date : 25-Oct-2014 18:12 clh

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2	
	200 Level 9											
116 1-2 Diethylbenzene	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
M 126 Total Diethylbenzene	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
$ 40 Dibromofluoromethane	0.28560 0.28033	0.28328	0.28588	0.27641	0.27665	0.27791	AVRG		0.28087		1.45346	
$ 50 1,2-Dichloroethane-d4	0.18748 0.17343	0.17775	0.17733	0.17833	0.17442	0.16937	AVRG		0.17687		3.18080	
$ 68 Toluene-d8	2.18743 2.06390	2.21334	2.11486	2.13003	2.10503	2.13351	AVRG		2.13544		2.36253	
$ 95 Bromofluorobenzene	0.72556 0.70453	0.73633	0.72105	0.71970	0.71363	0.72234	AVRG		0.72045		1.36786	

2141022205

151

Data File: /var/chem/msv9.i/2141024.s.b/j5011d.d
Report Date: 25-Oct-2014 18:09

GCAL, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: 1600
Level: LOW
Data Type: MS DATA
SpikeList File: icv.spk
Sublist File: 8260b.sub
Method File: /var/chem/msv9.i/2141024.s.b/8260dodw9.m
Misc Info: MSV~31797~*1*LBH

Client SDG: 2141024.s
Fraction: VOA
Client Smp ID: ICVSTD050
Operator: LBH
SampleType: LCS
Quant Type: ISTD

	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	1 Dichlorodifluoromethane	50.0	49.3	98.56	80-120
	2 Chloromethane ++	50.0	53.4	106.77	80-120
	3 Vinyl Chloride +	50.0	49.8	99.62	80-120
	6 Bromomethane	50.0	51.3	102.56	80-120
	7 Chloroethane	50.0	53.6	107.18	80-120
	8 Trichlorofluoromethane	50.0	49.9	99.77	80-120
	10 1,1-Dichloroethene +	50.0	50.7	101.42	80-120
	12 1,1,2Trichlotrifluoroethane	50.0	51.5	103.04	80-120
	11 Carbon Disulfide	50.0	50.8	101.55	80-120
	13 Methyl Iodide	50.0	40.7	81.44	80-120
	14 Acrolein	250	223	89.21	80-120
	16 Methylene Chloride	50.0	48.7	97.48	80-120
	17 Acetone	50.0	46.0	91.96	80-120
	18 trans-1,2-Dichloroethene	50.0	49.8	99.58	80-120
	19 Methyl Acetate	50.0	49.1	98.17	80-120
	20 Hexane	50.0	49.9	99.81	80-120
	21 MTBE	50.0	52.1	104.21	80-120
	26 1,1-Dichloroethane ++	50.0	49.6	99.11	80-120
	27 Acrylonitrile	250	245	98.01	80-120
	28 Vinyl Acetate	50.0	43.1	86.22	80-120
	29 cis-1,2-Dichloroethene	50.0	49.7	99.30	80-120
M	75 Total 1,2-Dichloroethene	100	99.4	99.44	80-120
	30 2,2-Dichloropropane	50.0	50.3	100.65	80-120
	32 Cyclohexane	50.0	49.9	99.70	80-120
	34 Bromochloromethane	50.0	47.5	95.07	80-120
	35 Chloroform +	50.0	50.1	100.29	80-120
	36 Carbon Tetrachloride	50.0	48.5	97.05	80-120
	41 1,1,1-Trichloroethane	50.0	47.8	95.61	80-120
	44 2-Butanone	50.0	52.7	105.48	80-120
	43 1,1-Dichloropropene	50.0	54.0	107.95	80-120
	46 Benzene	50.0	47.6	95.12	80-120
	51 1,2-Dichloroethane	50.0	48.2	96.46	80-120
	55 Methyl Cyclohexane	50.0	55.8	111.50	80-120

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
56 Trichloroethene	50.0	50.2	100.43	80-120
57 Dibromomethane	50.0	47.4	94.82	80-120
59 1,2-Dichloropropane +	50.0	48.0	96.09	80-120
60 Bromodichloromethane	50.0	48.0	96.01	80-120
65 1-Bromo-2-chloroethane	50.0	48.5	96.97	80-120
64 2-Chloroethyl vinyl ether	50.0	51.4	102.85	80-120
67 cis-1,3-Dichloropropene	50.0	53.1	106.10	80-120
69 Toluene +	50.0	50.7	101.44	80-120
73 4-methyl-2-pentanone	50.0	51.9	103.81	80-120
71 Tetrachloroethene	50.0	51.9	103.85	80-120
74 trans-1,3-Dichloropropene	50.0	51.7	103.30	80-120
M 82 1-3 Dichloropropene total	100	105	104.70	80-120
76 1,1,2-Trichloroethane	50.0	48.1	96.13	80-120
78 Dibromochloromethane	50.0	48.2	96.47	80-120
79 1,3-Dichloropropane	50.0	50.3	100.65	80-120
80 1,2-Dibromoethane(EDB)	50.0	48.7	97.42	80-120
83 2-Hexanone	50.0	46.5	92.97	80-120
86 1-Chlorohexane	50.0	48.7	97.33	80-120
85 Chlorobenzene ++	50.0	50.1	100.24	80-120
87 Ethylbenzene +	50.0	50.0	100.09	80-120
88 1,1,1,2-Tetrachloroethane	50.0	47.4	94.82	80-120
89 p,m-Xylene	100	103	102.94	80-120
90 o-Xylene	50.0	53.7	107.41	80-120
M 121 TOTAL XYLENE	150	157	104.43	80-120
91 Styrene	50.0	54.8	109.69	80-120
92 Bromoform ++	50.0	46.6	93.17	80-120
93 Isopropylbenzene	50.0	54.8	109.57	80-120
96 Bromobenzene	50.0	49.2	98.40	80-120
97 n-Propylbenzene	50.0	52.2	104.43	80-120
98 1,1,2,2-Tetrachloroethane++	50.0	49.8	99.57	80-120
99 2-Chlorotoluene	50.0	51.6	103.30	80-120
102 1,3,5-Trimethylbenzene	50.0	56.0	111.99	80-120
100 1,2,3-Trichloropropane	50.0	51.9	103.73	80-120
101 trans-1,4-Dichloro-2-Butene	50.0	54.2	108.47	80-120
104 4-Chlorotoluene	50.0	51.8	103.64	80-120
105 tert-butylbenzene	50.0	54.1	108.17	80-120
107 1,2,4-Trimethylbenzene	50.0	57.5	114.92	80-120
108 sec-Butylbenzene	50.0	56.2	112.33	80-120
110 p-Isopropyltoluene	50.0	58.0	116.06	80-120
113 1,3-Dichlorobenzene	50.0	49.7	99.40	80-120
115 1,4-Dichlorobenzene	50.0	51.6	103.29	80-120
117 n-Butylbenzene	50.0	55.2	110.33	80-120
118 1,2-Dichlorobenzene	50.0	50.3	100.56	80-120
119 1,2-Dibromo-3-Chloropropane	50.0	51.7	103.30	80-120
120 Hexachlorobutadiene	50.0	52.0	104.00	80-120
122 1,2,4-Trichlorobenzene	50.0	55.0	110.00	80-120
124 Naphthalene	50.0	48.4	96.71	80-120

Data File: /var/chem/msv9.i/2141029p.s.b/j5238.d
Report Date: 30-Oct-2014 14:18

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msv9.i
Lab File ID: j5238.d
Analysis Type: WATER
Lab Sample ID: 1400
Method: /var/chem/msv9.i/2141029p.s.b/8260dodw9.m

Injection Date: 29-OCT-2014 19:57
Init. Cal. Date(s): 10-OCT-2014 24-OCT-2014
Init. Cal. Times: 15:25 14:03
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 Dichlorodifluoromethane	0.23620	0.22110	0.22110	0.010	-6.39343	20.00000	Averaged
2 Chloromethane ++	48.77070	50.00000	0.31487	0.100	-2.45861	20.00000	Linear
3 Vinyl Chloride +	41.37474	50.00000	0.26844	0.010	-17.25052	20.00000	Linear
6 Bromomethane	49.95947	50.00000	0.15994	0.010	-0.08106	20.00000	Linear
7 Chloroethane	51.86772	50.00000	0.20377	0.010	3.73544	20.00000	Linear
8 Trichlorofluoromethane	0.42043	0.40004	0.40004	0.010	-4.85039	20.00000	Averaged
10 1,1-Dichloroethene +	50.54476	50.00000	0.22300	0.010	1.08951	20.00000	Linear
12 1,1,2Trichlotrifluoroethane	0.23305	0.24435	0.24435	0.010	4.84990	20.00000	Averaged
11 Carbon Disulfide	51.21209	50.00000	0.78797	0.010	2.42419	20.00000	Linear
13 Methyl Iodide	55.83665	50.00000	0.16908	0.010	11.67330	20.00000	Quadratic
14 Acrolein	0.03555	0.03499	0.03499	0.010	-1.58181	20.00000	Averaged
16 Methylene Chloride	48.03368	50.00000	0.41335	0.010	-3.93265	20.00000	Linear
17 Acetone	0.25723	0.21971	0.21971	0.010	-14.58672	20.00000	Averaged
18 trans-1,2-Dichloroethene	48.60638	50.00000	0.38577	0.010	-2.78723	20.00000	Linear
19 Methyl Acetate	0.60525	0.58238	0.58238	0.010	-3.77957	20.00000	Averaged
20 Hexane	51.23508	50.00000	0.39478	0.010	2.47015	20.00000	Linear
21 MTBE	0.82024	0.82644	0.82644	0.010	0.75588	20.00000	Averaged
26 1,1-Dichloroethane ++	48.21622	50.00000	0.50964	0.100	-3.56756	20.00000	Linear
27 Acrylonitrile	0.12252	0.10565	0.10565	0.010	-13.76600	20.00000	Averaged
28 Vinyl Acetate	0.17416	0.14711	0.14711	0.010	-15.53048	20.00000	Averaged
29 cis-1,2-Dichloroethene	47.41661	50.00000	0.38910	0.010	-5.16679	20.00000	Linear
M 75 Total 1,2-Dichloroethene	96.02299	100	0.38744	0.010	-3.97701	20.00000	Linear
30 2,2-Dichloropropane	50.07344	50.00000	0.40690	0.010	0.14689	20.00000	Linear
32 Cyclohexane	48.58900	50.00000	0.45685	0.010	-2.82199	20.00000	Linear
34 Bromochloromethane	0.15313	0.14700	0.14700	0.010	-4.00774	20.00000	Averaged
35 Chloroform +	49.01853	50.00000	0.49956	0.010	-1.96295	20.00000	Linear
36 Carbon Tetrachloride	0.38669	0.36775	0.36775	0.010	-4.89825	20.00000	Averaged
$ 40 Dibromofluoromethane	0.28087	0.27851	0.27851	0.010	-0.84035	20.00000	Averaged
41 1,1,1-Trichloroethane	0.44831	0.41318	0.41318	0.010	-7.83574	20.00000	Averaged
44 2-Butanone	0.25122	0.25584	0.25584	0.010	1.84002	20.00000	Averaged
43 1,1-Dichloropropene	0.34871	0.36356	0.36356	0.010	4.25966	20.00000	Averaged
46 Benzene	1.19360	1.13376	1.13376	0.010	-5.01373	20.00000	Averaged
$ 50 1,2-Dichloroethane-d4	0.17687	0.17503	0.17503	0.010	-1.04289	20.00000	Averaged
51 1,2-Dichloroethane	0.45284	0.43185	0.43185	0.010	-4.63506	20.00000	Averaged
55 Methyl Cyclohexane	0.40114	0.44080	0.44080	0.010	9.88805	20.00000	Averaged

Data File: /var/chem/msv9.i/2141029p.s.b/j5238.d
Report Date: 30-Oct-2014 14:18

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msv9.i
Lab File ID: j5238.d
Analysis Type: WATER
Lab Sample ID: 1400
Method: /var/chem/msv9.i/2141029p.s.b/8260dodw9.m

Injection Date: 29-OCT-2014 19:57
Init. Cal. Date(s): 10-OCT-2014 24-OCT-2014
Init. Cal. Times: 15:25 14:03
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
56 Trichloroethene	48.93206	50.00000	0.29575	0.010	-2.13588	20.00000	Linear
57 Dibromomethane	0.20187	0.18705	0.18705	0.010	-7.34125	20.00000	Averaged
59 1,2-Dichloropropane +	0.31395	0.29792	0.29792	0.010	-5.10839	20.00000	Averaged
60 Bromodichloromethane	0.42491	0.40141	0.40141	0.010	-5.53137	20.00000	Averaged
65 1-Bromo-2-chloroethane	0.45949	0.43929	0.43929	0.010	-4.39526	20.00000	Averaged
64 2-Chloroethyl vinyl ether	45.68610	50.00000	0.17618	0.010	-8.62780	20.00000	Linear
67 cis-1,3-Dichloropropene	0.46055	0.48238	0.48238	0.010	4.74007	20.00000	Averaged
$ 68 Toluene-d8	2.13544	2.12812	2.12812	0.010	-0.34309	20.00000	Averaged
69 Toluene +	48.90868	50.00000	2.56772	0.010	-2.18264	20.00000	Linear
73 4-methyl-2-pentanone	0.85829	0.83640	0.83640	0.010	-2.55109	20.00000	Averaged
71 Tetrachloroethene	51.20514	50.00000	0.49669	0.010	2.41028	20.00000	Linear
74 trans-1,3-Dichloropropene	0.46032	0.47419	0.47419	0.010	3.01435	20.00000	Averaged
M 82 1-3 Dichloropropene total	0.46043	0.47828	0.47828	0.010	3.87743	20.00000	Averaged
76 1,1,2-Trichloroethane	0.62886	0.58415	0.58415	0.010	-7.11024	20.00000	Averaged
78 Dibromochloromethane	0.67904	0.65036	0.65036	0.010	-4.22478	20.00000	Averaged
79 1,3-Dichloropropane	1.09020	1.03915	1.03915	0.010	-4.68318	20.00000	Averaged
80 1,2-Dibromoethane(EDB)	0.62691	0.59695	0.59695	0.010	-4.77837	20.00000	Averaged
83 2-Hexanone	45.18309	50.00000	0.70122	0.010	-9.63383	20.00000	Linear
86 1-Chlorohexane	47.42399	50.00000	0.73362	0.010	-5.15202	20.00000	Linear
85 Chlorobenzene ++	49.96192	50.00000	1.74858	0.300	-0.07615	20.00000	Linear
87 Ethylbenzene +	0.94568	0.94213	0.94213	0.010	-0.37501	20.00000	Averaged
88 1,1,1,2-Tetrachloroethane	0.63644	0.60040	0.60040	0.010	-5.66332	20.00000	Averaged
89 p,m-Xylene	1.13049	1.14100	1.14100	0.010	0.92962	20.00000	Averaged
90 o-Xylene	1.00888	1.05454	1.05454	0.010	4.52568	20.00000	Averaged
M 121 TOTAL XYLENE	1.08995	1.11218	1.11218	0.010	2.03915	20.00000	Averaged
91 Styrene	1.74447	1.87061	1.87061	0.010	7.23111	20.00000	Averaged
92 Bromoform ++	0.57652	0.52692	0.52692	0.100	-8.60369	20.00000	Averaged
93 Isopropylbenzene	2.64448	2.81000	2.81000	0.010	6.25920	20.00000	Averaged
$ 95 Bromofluorobenzene	0.72045	0.72790	0.72790	0.010	1.03459	20.00000	Averaged
96 Bromobenzene	1.51705	1.45475	1.45475	0.010	-4.10631	20.00000	Averaged
97 n-Propylbenzene	3.61630	3.61359	3.61359	0.010	-0.07491	20.00000	Averaged
98 1,1,2,2-Tetrachloroethane++	0.98069	0.95582	0.95582	0.300	-2.53641	20.00000	Averaged
99 2-Chlorotoluene	2.46065	2.46319	2.46319	0.010	0.10322	20.00000	Averaged
102 1,3,5-Trimethylbenzene	2.36650	2.51781	2.51781	0.010	6.39390	20.00000	Averaged
100 1,2,3-Trichloropropane	1.08933	1.08565	1.08565	0.010	-0.33801	20.00000	Averaged

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msv9.i
Lab File ID: j5238.d
Analysis Type: WATER
Lab Sample ID: 1400
Method: /var/chem/msv9.i/2141029p.s.b/8260dodw9.m

Injection Date: 29-OCT-2014 19:57
Init. Cal. Date(s): 10-OCT-2014 24-OCT-2014
Init. Cal. Times: 15:25 14:03
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
101 trans-1,4-Dichloro-2-Butene	0.25733	0.26733	0.26733	0.010	3.88669	20.00000	Averaged
104 4-Chlorotoluene	2.22424	2.26645	2.26645	0.010	1.89770	20.00000	Averaged
105 tert-butylbenzene	1.34299	1.41263	1.41263	0.010	5.18544	20.00000	Averaged
107 1,2,4-Trimethylbenzene	2.33873	2.52165	2.52165	0.010	7.82131	20.00000	Averaged
108 sec-Butylbenzene	3.01854	3.24104	3.24104	0.010	7.37136	20.00000	Averaged
110 p-Isopropyltoluene	2.42742	2.69574	2.69574	0.010	11.05362	20.00000	Averaged
113 1,3-Dichlorobenzene	1.57756	1.54942	1.54942	0.010	-1.78348	20.00000	Averaged
115 1,4-Dichlorobenzene	50.82856	50.00000	1.59960	0.010	1.65712	20.00000	Linear
117 n-Butylbenzene	2.37475	2.51737	2.51737	0.010	6.00594	20.00000	Averaged
118 1,2-Dichlorobenzene	1.51444	1.51056	1.51056	0.010	-0.25568	20.00000	Averaged
119 1,2-Dibromo-3-Chloropropane	0.21005	0.21127	0.21127	0.010	0.58177	20.00000	Averaged
120 Hexachlorobutadiene	0.46650	0.47792	0.47792	0.010	2.44728	20.00000	Averaged
122 1,2,4-Trichlorobenzene	0.99101	1.06141	1.06141	0.010	7.10313	20.00000	Averaged
124 Naphthalene	46.12940	50.00000	2.92751	0.010	-7.74120	20.00000	Linear
125 1,2,3-Trichlorobenzene	48.96836	50.00000	1.09988	0.010	-2.06329	20.00000	Linear

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-AUG-2014 11:40
End Cal Date : 24-OCT-2014 14:28
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv12.i/2141024.s.b/8260dodw12.m
Cal Date : 25-Oct-2014 15:44 clh

Calibration File Names:
Level 3: /var/chem/msv12.i/2141024.s.b/l7892d.d
Level 4: /var/chem/msv12.i/2141024.s.b/l7893d.d
Level 5: /var/chem/msv12.i/2141024.s.b/l7894d.d
Level 6: /var/chem/msv12.i/2141024.s.b/l7895d.d
Level 7: /var/chem/msv12.i/2141024.s.b/l7896d.d
Level 8: /var/chem/msv12.i/2141024.s.b/l7898d.d
Level 9: /var/chem/msv12.i/2141024.s.b/l7900d.d

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	200 Level 9	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
1 Dichlorodifluoromethane	0.18734	0.17012	0.18455	0.20586	0.19319	0.19461	0.18375	AVRG		0.18849		5.88362
2 Chloromethane ++	4451	12470	24648	56021	118615	258026	566148	LINR	0.02378	0.26456		0.99840
3 Vinyl Chloride +	0.35701	0.25045	0.26527	0.27866	0.26307	0.28073	0.28030	AVRG		0.28221		12.33876
5 1-3 Butadiene	0.38585	0.31364	0.33140	0.28427	0.28219	0.29193	0.28847	AVRG		0.31111		12.05699

2141024S 157

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-AUG-2014 11:40
End Cal Date : 24-OCT-2014 14:28
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv12.i/2141024.s.b/8260dodw12.m
Cal Date : 25-Oct-2014 15:44 clh

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2	
	200 Level 9											
6 Bromomethane	0.20573	0.14917	0.16589	0.19079	0.18698	0.20797						
	0.21228						AVRG		0.18840		12.46119	
7 Chloroethane	3003	13539	26030	55327	127859	247952						
	+++++						LINR	-0.02635	0.24046		0.99908	
8 Trichlorofluoromethane	0.44956	0.43326	0.46895	0.50343	0.48371	0.48890						
	0.47955						AVRG		0.47248		5.09692	
4 2-Chloropropene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+00		0.000e+00	<-
9 Ethyl Ether	0.26635	0.29062	0.29893	0.29731	0.29584	0.29297						
	0.28669						AVRG		0.28982		3.84941	
10 1,1-Dichloroethene +	0.37989	0.25323	0.28594	0.29916	0.28644	0.29720						
	0.28905						AVRG		0.29870		13.01519	
11 Carbon Disulfide	14595	44399	92535	201530	474339	1000036						
	2042574						LINR	-0.00205	0.96173		0.99989	

2141024.s.b 158

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-AUG-2014 11:40
End Cal Date : 24-OCT-2014 14:28
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv12.i/2141024.s.b/8260dodw12.m
Cal Date : 25-Oct-2014 15:44 clh

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2
	200 Level 9										
168 Ethanol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00 <-
12 1,1,2Trichlotrifluoroethane	0.26845	0.26594	0.27420	0.30351	0.28539	0.29102					
	0.27874						AVRG		0.28103		4.73412
13 Methyl Iodide	2805	8908	20541	45929	124485	314748					
	650457						LINR	0.07479	0.31127		0.99788
14 Acrolein	0.03201	0.03707	0.03613	0.03634	0.03945	0.03671					
	0.03725						AVRG		0.03642		6.12679
15 Allyl chloride	0.36573	0.33847	0.32017	0.33275	0.31768	0.30942					
	0.29989						AVRG		0.32630		6.66587
16 Methylene Chloride	9380	27560	52679	109201	252419	528446					
	1058773						LINR	-0.02261	0.49760		0.99977
17 Acetone	4443	16415	31884	65411	146921	312873					
	682387						LINR	0.01776	0.31878		0.99887

2141025.B 1159

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-AUG-2014 11:40
End Cal Date : 24-OCT-2014 14:28
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv12.i/2141024.s.b/8260dodw12.m
Cal Date : 25-Oct-2014 15:44 clh

Compound	1 Level 3 / 200 Level 9	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2
18 trans-1,2-Dichloroethene	6852 1032910	22777	47725	100389	240658	511221	LINR	-0.00327	0.48719		0.99981
19 Methyl Acetate	0.81004 0.66552	0.71503	0.69977	0.72570	0.68401	0.68777	AVRG		0.71255		6.65387
20 Hexane	0.41973 0.39052	0.38483	0.41690	0.43846	0.41262	0.40649	AVRG		0.40994		4.43646
21 MTBE	1.11526 1.04094	1.04154	1.08256	1.10178	1.03305	1.06395	AVRG		1.06844		3.02226
22 tert-Butyl Alcohol	986 100662	4890	6082	11750	25965	55106	LINR	-0.07135	0.05054		0.99903
23 Acetonitrile	0.05984 0.05181	0.05921	0.05910	0.05855	0.06012	0.05037	AVRG		0.05700		7.17648
24 Isopropyl Ether	1.02252 0.93580	1.09968	0.97812	0.97719	0.96063	0.97479	AVRG		0.99268		5.42071

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-AUG-2014 11:40
End Cal Date : 24-OCT-2014 14:28
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv12.i/2141024.s.b/8260dodw12.m
Cal Date : 25-Oct-2014 15:44 clh

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2	
	200 Level 9											
25 Chloroprene	0.32074	0.32471	0.32983	0.33957	0.33769	0.33433						
	0.34201						AVRG		0.33270		2.38088	
26 1,1-Dichloroethane ++	5842	19586	40534	88628	208544	446441						
	879511						LINR	-0.01196	0.41613		0.99938	
27 Acrylonitrile	0.08979	0.09259	0.09857	0.10329	0.10622	0.10784						
	0.11253						AVRG		0.10155		8.16542	
165 Ethyl Tert-butyl Ether	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+00		0.000e+00	<-
28 Vinyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+00		0.000e+00	
29 cis-1,2-Dichloroethene	4191	14959	30499	68428	164325	374673						
	776629						LINR	0.03262	0.36749		0.99934	
M 75 Total 1,2-Dichloroethene	11043	37736	78224	168817	404983	885894						
	1809539						LINR	0.02408	0.42730		0.99972	

2141027SS 154

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-AUG-2014 11:40
End Cal Date : 24-OCT-2014 14:28
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv12.i/2141024.s.b/8260dodw12.m
Cal Date : 25-Oct-2014 15:44 clh

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2
	200 Level 9										
30 2,2-Dichloropropane	0.46212	0.30859	0.34711	0.35562	0.35737	0.38429					
	0.37534						AVRG		0.37006		12.76076
32 Cyclohexane	0.30890	0.28863	0.32345	0.38387	0.37885	0.41235					
	0.41012						AVRG		0.35802		14.05407
34 Bromochloromethane	0.13085	0.12161	0.12715	0.13649	0.12999	0.14234					
	0.13936						AVRG		0.13254		5.47606
35 Chloroform +	6261	20449	42296	92653	220098	498894					
	1041502						LINR	0.03077	0.49188		0.99932
36 Carbon Tetrachloride	0.34853	0.29810	0.30825	0.33226	0.32323	0.34852					
	0.36106						AVRG		0.33142		6.94480
37 Ethyl Acetate	0.41441	0.43553	0.46268	0.46822	0.47189	0.48137					
	0.49267						AVRG		0.46097		5.88145
38 Tetrahydrofuran	0.16073	0.17581	0.18027	0.17762	0.17784	0.18012					
	0.18095						AVRG		0.17619		4.00441

21410225 152

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-AUG-2014 11:40
End Cal Date : 24-OCT-2014 14:28
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv12.i/2141024.s.b/8260dodw12.m
Cal Date : 25-Oct-2014 15:44 clh

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	200 Level 9	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2	
41 1,1,1-Trichloroethane	0.51166	0.36367	0.37488	0.40349	0.38405	0.41951	0.42141	AVRG		0.41124		12.01181	
42 sec-butanol	722	4114	5437	9869	23601	52465	99296	LINR	-0.02537	0.05004		0.99950	
43 1,1-Dichloropropene	0.39981	0.27698	0.29847	0.33050	0.33472	0.36518	0.36921	AVRG		0.33927		12.54865	
44 2-Butanone	0.22054	0.21215	0.22075	0.22793	0.22820	0.24797	0.27223	AVRG		0.23282		8.85713	
45 2,2,4 Trimethylpentane	0.65311	0.65871	0.61226	0.60146	0.60985	0.62452	0.64144	AVRG		0.62876		3.58212	
31 Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
46 Benzene	1.35868	0.91369	0.97581	1.07329	1.04290	1.14239	1.12218	AVRG		1.08985		13.11580	

2141022205 193

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-AUG-2014 11:40
End Cal Date : 24-OCT-2014 14:28
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv12.i/2141024.s.b/8260dodw12.m
Cal Date : 25-Oct-2014 15:44 clh

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	200 Level 9	Curve	Coefficients b	m1	m2	%RSD or R^2	
47 Propionitrile	0.05084	0.05654	0.06226	0.06305	0.06439	0.06480	0.06648	AVRG		0.06120		9.06371	
48 Methylacrylonitrile	0.27510	0.36619	0.27607	0.29084	0.28730	0.29616	0.28812	AVRG		0.29711		10.56873	
166 Tert-butyl formate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
51 1,2-Dichloroethane	0.41922	0.34870	0.35296	0.38028	0.36507	0.41493	0.41039	AVRG		0.38451		7.85512	
52 Isobutyl Alcohol	0.02724	0.02553	0.02657	0.02511	0.02669	0.02556	0.02611	AVRG		0.02612		2.90233	
55 Methyl Cyclohexane	0.30696	0.26819	0.31781	0.36623	0.37123	0.39699	0.39676	AVRG		0.34631		14.24174	
56 Trichloroethene	0.35415	0.25025	0.26980	0.30609	0.29750	0.32430	0.32196	AVRG		0.30344		11.53648	

EST 5072017

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-AUG-2014 11:40
End Cal Date : 24-OCT-2014 14:28
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv12.i/2141024.s.b/8260dodw12.m
Cal Date : 25-Oct-2014 15:44 clh

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2	
	200 Level 9											
167 tert-amyl Methyl Ether	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+00		0.000e+00	<-
39 1,3-difluorobenzene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+00		0.000e+00	<-
33 n-Butanol	0.06199	0.07999	0.07719	0.08299	0.08415	0.08281						
	0.08760						AVRG		0.07953		10.55099	
57 Dibromomethane	0.17600	0.15353	0.15921	0.17520	0.16659	0.18938						
	0.19712						AVRG		0.17386		8.99954	
58 2-3 Dichloro-1-Proprene	0.38321	0.51047	0.39531	0.42887	0.41836	0.42971						
	0.42314						AVRG		0.42701		9.55592	
59 1,2-Dichloropropane +	0.32391	0.24993	0.25222	0.27223	0.26539	0.29732						
	0.30256						AVRG		0.28051		9.96261	
60 Bromodichloromethane	0.40114	0.32458	0.34154	0.36841	0.35921	0.41290						
	0.41210						AVRG		0.37427		9.41294	

2141025.SEQ 25-OCT-14 15:55

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-AUG-2014 11:40
End Cal Date : 24-OCT-2014 14:28
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv12.i/2141024.s.b/8260dodw12.m
Cal Date : 25-Oct-2014 15:44 clh

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	200 Level 9	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2	
164 Tert-amyl alcohol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
61 Methyl methacrylate	0.33492	0.34566	0.36861	0.36296	0.37396	0.38367	0.39181	AVRG		0.36594		5.50791	
62 1,4- Dioxane	0.00458	0.00347	0.00353	0.00352	0.00379	0.00346	0.00375	AVRG		0.00373		10.69684	<-
49 1,4-difluorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
54 1,2-difluorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
65 1-Bromo-2-chloroethane	299	1988	3822	8602	21409	49579	107171	LINR	0.05981	0.05069		0.99859	
64 2-Chloroethyl vinyl ether	+++++	+++++	4101	10313	29741	74969	190390	LINR	0.25287	0.09343		0.99159	

2141027395 166

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-AUG-2014 11:40
End Cal Date : 24-OCT-2014 14:28
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv12.i/2141024.s.b/8260dodw12.m
Cal Date : 25-Oct-2014 15:44 clh

Compound	1 Level 3 / 200 Level 9	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2
67 cis-1,3-Dichloropropene	3505 1018481	15804	34053	80155	209177	488208	LINR	0.05667	0.48460		0.99910
66 3-ethyltoluene	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00 <-
69 Toluene +	15400 2637191	52966	110427	244961	584209	1290252	LINR	-0.00561	2.71229		0.99969
81 2-Nitropropane	0.35827 0.35215	0.45964	0.31513	0.33159	0.33518	0.36800	AVRG		0.36000		13.17324
71 Tetrachloroethene	0.78024 0.61089	0.52347	0.52792	0.57786	0.56966	0.62224	AVRG		0.60175		14.47800
73 4-methyl-2-pentanone	0.78530 1.02689	0.76337	0.84840	0.89503	0.91263	0.98253	AVRG		0.88773		10.93419
74 trans-1,3-Dichloropropene	2995 968504	14289	31319	76581	203836	462105	LINR	0.05557	0.46060		0.99940

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-AUG-2014 11:40
End Cal Date : 24-OCT-2014 14:28
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv12.i/2141024.s.b/8260dodw12.m
Cal Date : 25-Oct-2014 15:44 clh

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	200 Level 9	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
M 82 1-3 Dichloropropene total	6500	30093	65372	156736	413013	950313	1986985	LINR	0.11224	0.47259		0.99925
77 Ethyl Methacrylate	0.70519	0.79340	0.81178	0.82095	0.82580	0.85532	0.87001	AVRG		0.81178		6.60810
76 1,1,2-Trichloroethane	0.70768	0.59008	0.60067	0.61794	0.60840	0.65489	0.64197	AVRG		0.63166		6.41238
78 Dibromochloromethane	0.72184	0.64236	0.67982	0.70866	0.70406	0.79581	0.79300	AVRG		0.72079		7.82761
79 1,3-Dichloropropane	0.94635	0.91574	0.96041	1.01438	0.99717	1.08013	1.05519	AVRG		0.99562		5.95516
70 1-Nitropropane	1007	5065	6554	15236	35998	86949	160727	LINR	-0.00099	0.19232		0.99834
80 1,2-Dibromoethane(EDB)	0.60958	0.55138	0.57241	0.62999	0.63615	0.70024	0.70806	AVRG		0.62969		9.39061

2141024295 169

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-AUG-2014 11:40
End Cal Date : 24-OCT-2014 14:28
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv12.i/2141024.s.b/8260dodw12.m
Cal Date : 25-Oct-2014 15:44 clh

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2
	200 Level 9										
72 2-ethyltoluene	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00 <-
112 1-3 Diethylbenzene	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00 <-
111 1-4 Diethylbenzene	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00 <-
83 2-Hexanone	0.64245 0.86302	0.60918	0.64075	0.69276	0.72523	0.80620	AVRG		0.71137		13.17563
116 1-2 Diethylbenzene	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00 <-
M 126 Total Diethylbenzene	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00 <-
86 1-Chlorohexane	0.78909 0.81580	0.57570	0.66734	0.73771	0.76511	0.82725	AVRG		0.73972		12.17656

2141024s05 159

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-AUG-2014 11:40
End Cal Date : 24-OCT-2014 14:28
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv12.i/2141024.s.b/8260dodw12.m
Cal Date : 25-Oct-2014 15:44 clh

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	200 Level 9	Curve	Coefficients b	m1	m2	%RSD or R^2	
85 Chlorobenzene ++	2.52530	1.73671	1.80954	1.90972	1.83897	1.92971	1.93853	AVRG		1.95550		13.37546	
87 Ethylbenzene +	1.34431	0.87960	0.93203	0.99196	0.96327	1.01822	1.02918	AVRG		1.02265		14.75823	
88 1,1,1,2-Tetrachloroethane	0.84522	0.62833	0.66910	0.68557	0.65225	0.67839	0.67084	AVRG		0.68996		10.29631	
89 p,m-Xylene	1.39930	1.03012	1.13838	1.20630	1.17659	1.25365	1.29175	AVRG		1.21373		9.68700	
63 Methyldisulfide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
90 o-Xylene	1.25557	0.89447	1.01107	1.14674	1.14823	1.22514	1.22645	AVRG		1.12967		11.67415	
M 121 TOTAL XYLENE	1.35139	0.98491	1.09594	1.18644	1.16714	1.24414	1.26998	AVRG		1.18571		10.13768	

2141025 176

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-AUG-2014 11:40
End Cal Date : 24-OCT-2014 14:28
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv12.i/2141024.s.b/8260dodw12.m
Cal Date : 25-Oct-2014 15:44 clh

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	200 Level 9	Curve	Coefficients b	m1	m2	%RSD or R^2
91 Styrene	1.79562	1.51113	1.68479	1.93329	1.92874	2.06387	2.07121	AVRG		1.85552		11.05966
92 Bromoform ++	0.70743	0.57034	0.60395	0.64522	0.65120	0.68720	0.70865	AVRG		0.65342		8.03278
93 Isopropylbenzene	2.97534	2.30128	2.58453	2.98382	2.99098	3.12579	3.11666	AVRG		2.86834		10.74438
96 Bromobenzene	1.55377	1.15896	1.22563	1.31591	1.23387	1.37063	1.37091	AVRG		1.31853		9.89174
97 n-Propylbenzene	4.07308	2.78641	3.01253	3.34677	3.22667	3.48753	3.46534	AVRG		3.34262		12.22211
98 1,1,2,2-Tetrachloroethane++	0.95867	0.91947	0.91892	0.98898	0.90968	0.94020	0.91204	AVRG		0.93542		3.13755
99 2-Chlorotoluene	2.88441	1.97882	2.11612	2.36072	2.18542	2.41274	2.39218	AVRG		2.33292		12.48413

2141024205 171

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-AUG-2014 11:40
End Cal Date : 24-OCT-2014 14:28
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv12.i/2141024.s.b/8260dodw12.m
Cal Date : 25-Oct-2014 15:44 clh

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	200 Level 9	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
102 1,3,5-Trimethylbenzene	2.56180	1.97398	2.18221	2.40793	2.26890	2.47968	2.43028	AVRG		2.32925		8.66811
100 1,2,3-Trichloropropane	0.96630	0.91487	0.92905	1.02100	0.94508	1.01029	1.02937	AVRG		0.97371		4.78121
101 trans-1,4-Dichloro-2-Butene	477	3484	7516	18624	47052	108969	249306	LINR	0.06144	0.23618		0.99862
103 Cyclohexanone	0.23931	0.26675	0.29758	0.29790	0.30850	0.29942	0.29393	AVRG		0.28620		8.52922
104 4-Chlorotoluene	2.37276	1.66417	1.83439	2.05893	1.91549	2.05455	2.00961	AVRG		1.98713		11.09576
105 tert-butylbenzene	1.27696	0.99703	1.12207	1.28256	1.20788	1.28359	1.26317	AVRG		1.20475		9.02226
106 Pentachloroethane	0.30272	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.30272		0.000e+00

2141023S05 172

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-AUG-2014 11:40
End Cal Date : 24-OCT-2014 14:28
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv12.i/2141024.s.b/8260dodw12.m
Cal Date : 25-Oct-2014 15:44 clh

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2
	200 Level 9										
107 1,2,4-Trimethylbenzene	2.56943	1.98942	2.17665	2.44947	2.28674	2.45626					
	2.40225						AVRG		2.33289		8.46687
108 sec-Butylbenzene	3.00399	2.25091	2.51752	2.83834	2.70491	2.85295					
	2.78437						AVRG		2.70757		9.25380
109 Dicyclopentadiene	3.11262	4.19259	2.98834	3.06259	2.88753	3.01414					
	2.81546						AVRG		3.15333		14.88214
110 p-Isopropyltoluene	2.44273	1.85721	2.06377	2.36894	2.39610	2.56284					
	2.54780						AVRG		2.31991		11.32200
113 1,3-Dichlorobenzene	7490	27313	58136	137367	338063	+++++					
	+++++						LINR	-0.00047	1.44120		0.99893
115 1,4-Dichlorobenzene	2.12444	1.46183	1.51652	1.57502	1.46859	1.57782					
	1.56388						AVRG		1.61259		14.31397
117 n-Butylbenzene	2.38803	1.59030	1.88281	2.11860	1.99002	2.14295					
	2.10194						AVRG		2.03066		12.23828

2141025.CLH

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-AUG-2014 11:40
End Cal Date : 24-OCT-2014 14:28
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv12.i/2141024.s.b/8260dodw12.m
Cal Date : 25-Oct-2014 15:44 clh

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	200 Level 9	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2	
118 1,2-Dichlorobenzene	1.77792	1.41437	1.51904	1.66579	1.55625	1.63870	1.59543	AVRG		1.59536		7.25046	
94 2-methylnapthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
119 1,2-Dibromo-3-Chloropropane	0.20685	0.20670	0.21076	0.22352	0.23356	0.25550	0.27673	AVRG		0.23052		11.66205	
163 3,3 Dimethyl-1-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
123 Benzal Chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00	<-
120 Hexachlorobutadiene	0.56151	0.37740	0.39954	0.40825	0.41992	0.43669	0.41218	AVRG		0.43079		14.03180	
122 1,2,4-Trichlorobenzene	3111	13358	31112	76002	217851	488943	1038830	LINR	0.03802	0.99294		0.99956	

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-AUG-2014 11:40
End Cal Date : 24-OCT-2014 14:28
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /var/chem/msv12.i/2141024.s.b/8260dodw12.m
Cal Date : 25-Oct-2014 15:44 clh

Compound	1 Level 3	5 Level 4	10 Level 5	20 Level 6	50 Level 7	100 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2
	200 Level 9										
124 Naphthalene	5247	31598	74985	192442	576415	1338217					
	3054782						LINR	0.08229	2.91348		0.99871
125 1,2,3-Trichlorobenzene	0.87217	0.71737	0.84641	0.89698	0.93029	1.02371					
	0.99951						AVRG		0.89806		11.41978
$ 40 Dibromofluoromethane	0.24875	0.24855	0.25079	0.25006	0.25179	0.25594					
	0.25869						AVRG		0.25208		1.51927
$ 50 1,2-Dichloroethane-d4	0.15517	0.15665	0.15456	0.15301	0.16174	0.16822					
	0.16643						AVRG		0.15940		3.81777
$ 68 Toluene-d8	2.44657	2.46195	2.40720	2.32985	2.32335	2.27045					
	2.21756						AVRG		2.35099		3.88714
$ 95 Bromofluorobenzene	0.87260	0.87484	0.85613	0.84654	0.89541	0.85240					
	0.84775						AVRG		0.86367		2.08350

2141023S05 175

Data File: /var/chem/msv12.i/2141024.s.b/l7902d.d
Report Date: 25-Oct-2014 15:44

GCAL, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: 1600
Level: LOW
Data Type: MS DATA
SpikeList File: icv.spk
Sublist File: 8260b.sub
Method File: /var/chem/msv12.i/2141024.s.b/8260dodw12.m
Misc Info: MSV~31795~*1*LBH

Client SDG: 2141024.s
Fraction: VOA
Client Smp ID: ICVSTD050
Operator: LBH
SampleType: LCS
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS	
1 Dichlorodifluoromethane	50.0	55.5	111.09	80-120	
2 Chloromethane ++	50.0	45.8	91.66	80-120	
3 Vinyl Chloride +	50.0	40.8	81.61	80-120	
6 Bromomethane	50.0	45.5	91.03	80-120	
7 Chloroethane	50.0	46.3	92.57	80-120	
8 Trichlorofluoromethane	50.0	47.7	95.30	80-120	
10 1,1-Dichloroethene +	50.0	43.5	86.91	80-120	
11 Carbon Disulfide	50.0	43.2	86.41	80-120	
12 1,1,2Trichlotrifluoroethane	50.0	45.1	90.10	80-120	
13 Methyl Iodide	50.0	45.3	90.64	80-120	
14 Acrolein	250	214	85.46	80-120	
16 Methylene Chloride	50.0	46.8	93.63	80-120	
17 Acetone	50.0	46.8	93.67	80-120	
18 trans-1,2-Dichloroethene	50.0	45.4	90.77	80-120	
19 Methyl Acetate	50.0	43.3	86.70	80-120	
20 Hexane	50.0	42.2	84.40	80-120	
21 MTBE	50.0	45.6	91.13	80-120	
26 1,1-Dichloroethane ++	50.0	46.2	92.36	80-120	
27 Acrylonitrile	250	280	112.09	80-120	
28 Vinyl Acetate	50.0	0.00	0.00*	80-120	NT
29 cis-1,2-Dichloroethene	50.0	43.2	86.33	80-120	
30 2,2-Dichloropropane	50.0	43.0	85.94	80-120	
32 Cyclohexane	50.0	47.5	94.91	80-120	
34 Bromochloromethane	50.0	45.4	90.84	80-120	
35 Chloroform +	50.0	44.4	88.79	80-120	
36 Carbon Tetrachloride	50.0	44.8	89.68	80-120	
41 1,1,1-Trichloroethane	50.0	43.2	86.33	80-120	
43 1,1-Dichloropropene	50.0	42.0	83.98	80-120	
44 2-Butanone	50.0	48.0	96.04	80-120	
46 Benzene	50.0	45.5	91.09	80-120	
51 1,2-Dichloroethane	50.0	45.4	90.73	80-120	
55 Methyl Cyclohexane	50.0	47.0	93.92	80-120	
56 Trichloroethene	50.0	47.0	94.01	80-120	

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
57 Dibromomethane	50.0	46.4	92.71	80-120
59 1,2-Dichloropropane +	50.0	46.7	93.39	80-120
60 Bromodichloromethane	50.0	47.7	95.42	80-120
65 1-Bromo-2-chloroethane	50.0	44.5	88.98	80-120
64 2-Chloroethyl vinyl ether	50.0	41.4	82.84	80-120
67 cis-1,3-Dichloropropene	50.0	43.4	86.79	80-120
69 Toluene +	50.0	47.0	94.03	80-120
71 Tetrachloroethene	50.0	44.5	88.91	80-120
73 4-methyl-2-pentanone	50.0	51.5	102.91	80-120
74 trans-1,3-Dichloropropene	50.0	43.7	87.36	80-120
76 1,1,2-Trichloroethane	50.0	46.9	93.84	80-120
78 Dibromochloromethane	50.0	47.8	95.67	80-120
79 1,3-Dichloropropane	50.0	48.9	97.86	80-120
80 1,2-Dibromoethane(EDB)	50.0	48.8	97.61	80-120
83 2-Hexanone	50.0	51.4	102.87	80-120
86 1-Chlorohexane	50.0	47.3	94.54	80-120
85 Chlorobenzene ++	50.0	46.1	92.26	80-120
87 Ethylbenzene +	50.0	45.5	90.90	80-120
88 1,1,1,2-Tetrachloroethane	50.0	45.7	91.46	80-120
89 p,m-Xylene	100	93.7	93.65	80-120
90 o-Xylene	50.0	49.7	99.33	80-120
91 Styrene	50.0	51.6	103.22	80-120
92 Bromoform ++	50.0	48.0	96.04	80-120
93 Isopropylbenzene	50.0	49.4	98.84	80-120
96 Bromobenzene	50.0	45.9	91.75	80-120
97 n-Propylbenzene	50.0	46.3	92.60	80-120
98 1,1,2,2-Tetrachloroethane++	50.0	45.6	91.11	80-120
99 2-Chlorotoluene	50.0	45.4	90.89	80-120
102 1,3,5-Trimethylbenzene	50.0	46.6	93.12	80-120
100 1,2,3-Trichloropropane	50.0	49.0	98.06	80-120
101 trans-1,4-Dichloro-2-Butene	50.0	48.9	97.84	80-120
104 4-Chlorotoluene	50.0	47.8	95.53	80-120
105 tert-butylbenzene	50.0	47.9	95.87	80-120
107 1,2,4-Trimethylbenzene	50.0	47.1	94.14	80-120
108 sec-Butylbenzene	50.0	46.2	92.42	80-120
110 p-Isopropyltoluene	50.0	49.1	98.14	80-120
113 1,3-Dichlorobenzene	50.0	48.1	96.20	80-120
115 1,4-Dichlorobenzene	50.0	44.0	87.92	80-120
117 n-Butylbenzene	50.0	48.3	96.60	80-120
118 1,2-Dichlorobenzene	50.0	47.0	93.97	80-120
119 1,2-Dibromo-3-Chloropropane	50.0	50.2	100.43	80-120
120 Hexachlorobutadiene	50.0	50.1	100.18	80-120
122 1,2,4-Trichlorobenzene	50.0	48.1	96.24	80-120
124 Naphthalene	50.0	46.7	93.32	80-120
125 1,2,3-Trichlorobenzene	50.0	53.4	106.79	80-120

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Lab File ID (Standard): 2141019/i1475D Date Analyzed: 10/19/14 Time: 1143

Instrument ID: MSV8 GC Column: RTX-VMS-30M ID: .25 (mm)

Analytical Batch: 544101 Heated Burge: (Y/N) N

	IS1 Area		RT		IS2 Area		RT		IS3 Area		RT	
STANDARD	1103884		6.40		478768		8.94		477296		10.41	
EPA Sample No.		#		#		#		#		#		#
LCS1375612	903313		6.37		392938		8.92		379918		10.39	
LCSD1375613	859636		6.37		378965		8.92		378296		10.38	
MB1375611	826517		6.37		349604		8.91		339296		10.38	
MA02MW001D-c	764996		6.37		314226		8.92		294676		10.38	

IS 1 ID: Fluorobenzene
IS 2 ID: Chlorobenzene d5
IS 3 ID: 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard values with an asterisk.
* Values outside of QC limits.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Lab File ID (Standard): 2141024/j5003d Date Analyzed: 10/24/14 Time: 1242

Instrument ID: MSV9 GC Column: RTX-VMS-30M ID: .25 (mm)

Analytical Batch: 544000 Heated Burge: (Y/N) N

	IS1 Area		IS1 RT		IS2 Area		IS2 RT		IS3 Area		IS3 RT	
STANDARD	247937		6.55		116845		9.05		113479		10.50	
EPA Sample No.		#		#		#		#		#		#
LCS1375110	263605		6.55		124301		9.05		120314		10.50	
LCSD1375111	265070		6.55		125041		9.05		120222		10.50	
MB1375109	232029		6.55		99548		9.05		96005		10.50	
MWQ-24	231174		6.55		99941		9.05		95830		10.51	
MWQ-24-ms	253595		6.55		121138		9.05		117733		10.50	
MWQ-24-sd	260806		6.55		122088		9.05		120626		10.50	
M114MW003	230056		6.55		98848		9.05		93949		10.50	
M114MW004	222373		6.55		96272		9.05		92170		10.50	
M114MW004-c	211567		6.55		94394		9.05		89421		10.50	
M114MW001	203073		6.55		91106		9.05		85250		10.50	
MWQ-24-c	208156		6.55		88672		9.05		87342		10.51	
MA02MW001D	199687		6.55		85878		9.05		76266		10.51	

IS 1 ID: Fluorobenzene
IS 2 ID: Chlorobenzene d5
IS 3 ID: 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard values with an asterisk.
* Values outside of QC limits.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Lab File ID (Standard): 2141024/l7896d Date Analyzed: 10/24/14 Time: 1257

Instrument ID: MSV12 GC Column: RTX-VMS-30M ID: .25 (mm)

Analytical Batch: 543720 Heated Burge: (Y/N) N

	IS1 Area		IS1 RT		IS2 Area		IS2 RT		IS3 Area		IS3 RT	
STANDARD	504429		6.53		219598		9.03		235784		10.49	
EPA Sample No.		#		#		#		#		#		#
LCS1373755	516734		6.52		225895		9.03		237515		10.49	
LCSD1373756	497432		6.53		217249		9.03		228910		10.49	
MB1373754	472174		6.53		182216		9.03		175879		10.49	
MA01MW002	472627		6.53		180159		9.03		176907		10.49	
MA01MW002-c	446127		6.53		171459		9.03		166913		10.49	
MA01MW001	452154		6.53		169831		9.03		168849		10.49	
MA01MW004	445094		6.52		169949		9.03		169357		10.49	
MA01MW004-a	455605		6.52		173311		9.03		169984		10.49	
MA01MW004-c	427099		6.53		164858		9.03		159704		10.49	
MA01MW003	437371		6.53		168667		9.03		163307		10.49	
MA01MW003-c	449750		6.52		171688		9.03		169772		10.49	
M114MW002	428334		6.53		165964		9.03		158478		10.49	
M114MW002-c	425259		6.53		165525		9.03		159020		10.49	

IS 1 ID: Fluorobenzene
IS 2 ID: Chlorobenzene d5
IS 3 ID: 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard values with an asterisk.
* Values outside of QC limits.

LABORATORY CHRONICLE: MSV DEPARTMENT

Date: 16-OCT-2014
Instrument: msv8.i
Analyst(s): CEK

	Standard		Conc	ID#	EXP
	8260 IS/SS		50	126-21-12	03/16/15
1000 (BFB)	BFB IS/SS		50	126-21-12	03/16/15
1400 (CCV)	8260		250	126-23-8	10/21/14
	AC/AC/VA		MC	126-23-5	11/30/14
	2-CVE		250	126-21-9	03/09/15
1600 (ICV)	8260	ICV	250	126-22-6	03/22/14
	AC/AC/VA		MC	126-24-4	01/31/15
	2-CVE	ICV	250	126-24-8	04/18/15

Sample ID	Comments	DataFile	Wgt/Vol	Injection Time	Dil	Anal	ALS
1000		i1469.d	0.00 ml	19-OCT-2014 09:22	1.000	ALC	2
1201		i1470.d	5.00 ml	19-OCT-2014 10:00	1.000	ALC	1
1203		i1471.d	5.00 ml	19-OCT-2014 10:25	1.000	ALC	1
1204		i1472.d	5.00 ml	19-OCT-2014 10:45	1.000	ALC	1
1205		i1473.d	5.00 ml	19-OCT-2014 11:04	1.000	ALC	1
1206		i1474.d	5.00 ml	19-OCT-2014 11:23	1.000	ALC	1
1207		i1475.d	5.00 ml	19-OCT-2014 11:43	1.000	ALC	1
BLANK		i1476.d	5.00 ml	19-OCT-2014 12:02	1.000	ALC	1
1208		i1477.d	5.00 ml	19-OCT-2014 12:22	1.000	ALC	1
BLANK		i1478.d	5.00 ml	19-OCT-2014 12:41	1.000	ALC	1
1209		i1479.d	5.00 ml	19-OCT-2014 13:00	1.000	ALC	1
BLANK		i1480.d	5.00 ml	19-OCT-2014 13:20	1.000	ALC	1
1600		i1481.d	5.00 ml	19-OCT-2014 13:39	1.000	ALC	1
1600		i1482.d	5.00 ml	19-OCT-2014 14:11	1.000	ALC	1
1371557		i1483.d	5.00 ml	19-OCT-2014 14:30	1.000	ALC	1
1371558		i1484.d	5.00 ml	19-OCT-2014 14:50	1.000	ALC	1
BLANK		i1485.d	5.00 ml	19-OCT-2014 15:09	1.000	ALC	1
BLANK		i1486.d	5.00 ml	19-OCT-2014 15:28	1.000	ALC	1
1371556	pH	i1487.d	5.00 ml	19-OCT-2014 15:48	1.000	ALC	1
21410174301	1	i1488.d	5.00 ml	19-OCT-2014 16:07	1.000	ALC	1
21410174302	1	i1489.d	5.00 ml	19-OCT-2014 16:26	1.000	ALC	1
21410174303	1	i1490.d	5.00 ml	19-OCT-2014 16:46	1.000	ALC	1
21410174304	1	i1491.d	5.00 ml	19-OCT-2014 17:05	1.000	ALC	1
21410174305	1	i1492.d	5.00 ml	19-OCT-2014 17:24	1.000	ALC	1
21410174306	1	i1493.d	5.00 ml	19-OCT-2014 17:44	1.000	ALC	1
21410153304	1	i1494.d	5.00 ml	19-OCT-2014 18:03	1.000	CEK	1
21410153301	1	i1495.d	5.00 ml	19-OCT-2014 18:23	100.000	CEK	1
21410153302	1	i1496.d	5.00 ml	19-OCT-2014 18:42	200.000	CEK	1
21410153303	1	i1497.d	5.00 ml	19-OCT-2014 19:01	100.000	CEK	1
21410153305	1	i1498.d	5.00 ml	19-OCT-2014 19:21	100.000	CEK	1
21410153306	1	i1499.d	5.00 ml	19-OCT-2014 19:40	100.000	CEK	1
BLANK		i1500.d	5.00 ml	19-OCT-2014 19:59	1.000	CEK	1
BLANK		i1501.d	5.00 ml	19-OCT-2014 20:19	1.000	CEK	1
BLANK		i1502.d	5.00 ml	19-OCT-2014 20:38	1.000	CEK	1

TUNE TIME = 21:22 10-19-14

LABORATORY CHRONICLE: MSV DEPARTMENT

Date: 30-OCT-2014
Instrument: msv8.i
Analyst(s): CEK

	Standard	Conc	ID#	EXP
	8260 IS/SS	50	126-21-12	03/16/15
1000 (BFB)	BFB IS/SS	50	126-21-12	03/16/15
1400 (CCV)	8260	250	126-24-12	11/09/14
	AC/AC/VA	MC	126-25-3	01/31/15
	2-CVE	250	126-24-7	04/18/15

Sample ID	Comments	DataFile	Wgt/Vol	Injection Time	Dil	Anal	ALS
1000		i1822.d	0.00 ml	30-OCT-2014 21:21	1.000	CEK	1
1400		i1823.d	5.00 ml	30-OCT-2014 22:03	1.000	CEK	1
1375612		i1823L.d	5.00 ml	30-OCT-2014 22:03	1.000	CEK	1
1375613		i1824.d	5.00 ml	30-OCT-2014 22:23	1.000	JCK	1
BLANK		i1825.d	5.00 ml	30-OCT-2014 22:42	1.000	JCK	1
BLANK		i1826.d	5.00 ml	30-OCT-2014 23:01	1.000	JCK	1
1375611	pH	i1827.d	5.00 ml	30-OCT-2014 23:21	1.000	JCK	1
21410272503	1	i1828.d	5.00 ml	30-OCT-2014 23:40	1.000	JCK	1
21410272504	1	i1829ms.d	5.00 ml	30-OCT-2014 23:59	1.000	JCK	1
21410272505	1	i1830msd.d	5.00 ml	31-OCT-2014 00:19	1.000	JCK	1
BLANK		i1831.d	5.00 ml	31-OCT-2014 00:38	1.000	JCK	1
21410220521	1	i1832.d	5.00 ml	31-OCT-2014 00:57	1.000	JCK	1
21410251906	1	i1833.d	5.00 ml	31-OCT-2014 01:16	1.000	JCK	1
21410251907	1	i1834.d	5.00 ml	31-OCT-2014 01:36	1.000	JCK	1
21410251908	1	i1835.d	5.00 ml	31-OCT-2014 01:55	1.000	JCK	1
21410251909	1	i1836.d	5.00 ml	31-OCT-2014 02:14	1.000	JCK	1
21410251910	1	i1837.d	5.00 ml	31-OCT-2014 02:34	1.000	JCK	1
21410251911	1	i1838.d	5.00 ml	31-OCT-2014 02:53	1.000	JCK	1
21410272501	1	i1839.d	5.00 ml	31-OCT-2014 03:12	1.000	JCK	1
21410272502	1	i1840.d	5.00 ml	31-OCT-2014 03:32	1.000	JCK	1
21410272506	1	i1841.d	5.00 ml	31-OCT-2014 03:51	1.000	JCK	1
21410272507	1	i1842.d	5.00 ml	31-OCT-2014 04:10	1.000	JCK	1
21410272508	1	i1843.d	5.00 ml	31-OCT-2014 04:29	1.000	JCK	1
21410272509	1	i1844.d	5.00 ml	31-OCT-2014 04:49	1.000	JCK	1
21410272510	1	i1845.d	5.00 ml	31-OCT-2014 05:08	1.000	JCK	1
21410272511	1	i1846.d	5.00 ml	31-OCT-2014 05:27	1.000	JCK	1
BLANK		i1847.d	5.00 ml	31-OCT-2014 05:47	1.000	JCK	1

TUNE = 09:21

LABORATORY CHRONICLE: MSV DEPARTMENT

Date: 24-OCT-2014
Instrument: msv9.i
Analyst(s): LBH

Standard	Conc ppm
Int. Standard	50
Surrogate	50
8260	50
Ac/Ac/VA	250/50
CVE	50

Sample ID	Comments	DataFile	Wgt/Vol	Injection Time	Dil	Anal	ALS
1000		j4992.d	0.00 ml	24-OCT-2014 06:39	1.000	LBH	2
1400		j4993.d	5.00 ml	24-OCT-2014 07:16	1.000	LBH	1
1400		j4994.d	5.00 ml	24-OCT-2014 07:36	1.000	LBH	2
1400		j4995.d	5.00 ml	24-OCT-2014 08:16	1.000	LBH	1
1000		j4996.d	0.00 ml	24-OCT-2014 09:41	1.000	LBH	81
1000		j4996d.d	0.00 ml	24-OCT-2014 09:41	1.000	LBH	81
BLANK		j4997.d	5.00 ml	24-OCT-2014 10:02	1.000	LBH	81
1201		j4998.d	5.00 ml	24-OCT-2014 11:02	1.000	LBH	1
1203		j4999.d	5.00 ml	24-OCT-2014 11:22	1.000	LBH	2
1203		j4999d.d	5.00 ml	24-OCT-2014 11:22	1.000	LBH	2
1204		j5000.d	5.00 ml	24-OCT-2014 11:42	1.000	LBH	3
1204		j5000d.d	5.00 ml	24-OCT-2014 11:42	1.000	LBH	3
1205		j5001.d	5.00 ml	24-OCT-2014 12:02	1.000	LBH	4
1205		j5001d.d	5.00 ml	24-OCT-2014 12:02	1.000	LBH	4
1206		j5002.d	5.00 ml	24-OCT-2014 12:22	1.000	LBH	5
1206		j5002d.d	5.00 ml	24-OCT-2014 12:22	1.000	LBH	5
1207		j5003.d	5.00 ml	24-OCT-2014 12:42	1.000	LBH	6
1207		j5003d.d	5.00 ml	24-OCT-2014 12:42	1.000	LBH	6
BLANK		j5004.d	5.00 ml	24-OCT-2014 13:02	1.000	LBH	81
1208		j5005.d	5.00 ml	24-OCT-2014 13:23	1.000	LBH	7
1208		j5005d.d	5.00 ml	24-OCT-2014 13:23	1.000	LBH	7
BLANK		j5006.d	5.00 ml	24-OCT-2014 13:43	1.000	LBH	81
1209		j5007.d	5.00 ml	24-OCT-2014 14:03	1.000	LBH	8
1209		j5007d.d	5.00 ml	24-OCT-2014 14:03	1.000	LBH	8
BLANK		j5008.d	5.00 ml	24-OCT-2014 14:23	1.000	LBH	81
1600		j5009.d	5.00 ml	24-OCT-2014 14:43	1.000	LBH	9
BLANK		j5010.d	5.00 ml	24-OCT-2014 15:03	1.000	LBH	10
1600		j5011.d	5.00 ml	24-OCT-2014 15:39	1.000	LBH	10
1600		j5011d.d	5.00 ml	24-OCT-2014 15:39	1.000	LBH	10
LCS		j5012.d	5.00 ml	24-OCT-2014 16:03	1.000	LBH	11
LCS		j5013.d	5.00 ml	24-OCT-2014 16:23	1.000	LBH	11
1400		j5014.d	5.00 ml	24-OCT-2014 16:43	1.000	LBH	13
LCS		j5015.d	5.00 ml	24-OCT-2014 17:03	1.000	LBH	14
BLANK		j5016.d	5.00 ml	24-OCT-2014 17:23	1.000	LBH	15
1373837		j5017.d	5.00 ml	24-OCT-2014 17:43	1.000	CLH	15
21410151501		j5018.d	5.00 ml	24-OCT-2014 18:03	1.000	CLH	16

LABORATORY CHRONICLE: MSV DEPARTMENT

Date: 29-OCT-2014
Instrument: msv9.i
Analyst(s): LBH

Standard	Conc ppm
Int. Standard	50
Surrogate	50
8260	50
Ac/Ac/VA	250/50
CVE	50

Sample ID	Comments	DataFile	Wgt/Vol	Injection Time	Dil	Anal	ALS
1000		j5233.d	0.00 ml	29-OCT-2014 17:31	1.000	LBH	2
1000		j5234.d	0.00 ml	29-OCT-2014 17:51	1.000	LBH	2
1000		j5235.d	0.00 ml	29-OCT-2014 18:12	1.000	CLH	2
1400		j5236.d	5.00 ml	29-OCT-2014 19:04	1.000	CEK	1
LCSD		j5237.d	5.00 ml	29-OCT-2014 19:24	1.000	CEK	2
1400		j5238.d	5.00 ml	29-OCT-2014 19:57	1.000	CEK	1
1375110		j5238L.d	5.00 ml	29-OCT-2014 19:57	1.000	CEK	1
1375111		j5239.d	5.00 ml	29-OCT-2014 20:17	1.000	CEK	2
BLANK		j5240.d	5.00 ml	29-OCT-2014 20:41	1.000	CLH	3
BLANK		j5241.d	5.00 ml	29-OCT-2014 21:01	1.000	CLH	4
1375109		j5242.d	5.00 ml	29-OCT-2014 21:21	1.000	CLH	4
21410220515		j5243.d	5.00 ml	29-OCT-2014 21:41	1.000	CLH	5
21410220516		j5244ms.d	5.00 ml	29-OCT-2014 22:01	1.000	CLH	6
21410220517		j5245msd.d	5.00 ml	29-OCT-2014 22:21	1.000	CLH	6
BLANK		j5246.d	5.00 ml	29-OCT-2014 22:42	1.000	CLH	7
21410220511		j5247.d	5.00 ml	29-OCT-2014 23:02	1.000	CLH	8
21410220512		j5248.d	5.00 ml	29-OCT-2014 23:22	1.000	CLH	9
21410220513		j5249.d	5.00 ml	29-OCT-2014 23:42	1.000	CLH	10
21410220514		j5250.d	5.00 ml	30-OCT-2014 00:02	1.000	CLH	11
21410220519		j5251.d	5.00 ml	30-OCT-2014 00:22	1.000	CLH	12
21410220520		j5252.d	5.00 ml	30-OCT-2014 00:42	1.000	CLH	13

LABORATORY CHRONICLE: MSV DEPARTMENT

Date: 24-OCT-2014
Instrument: msv9.i
Analyst(s): LBH

	Standard	Conc	ID#	EXP
	8260 IS/SS	50	126-17-3	12/18/14
1000 (BFB)	BFB IS/SS	50	126-17-3	12/18/14
1400 (CCV)	8260	250	126-24-10	11/02/14
	AC/AC/VA	MC	126-24-3	01/31/15
	2-CVE	250	126-21-9	03/09/15
1400 (CCV)	APP9-1	250	126-23-03	04/01/15
	APP9-2	MC	126-23-06	04/05/15
	THF	250	126-23-10	04/10/15

Sample ID	Comments	DataFile	Wgt/Vol	Injection Time	Dil	Anal	ALS
1000		17884.d	0.00 ml	24-OCT-2014 06:38	1.000	LBH	2
1400		17885.d	5.00 ml	24-OCT-2014 07:20	1.000	LBH	1
1400		17886.d	5.00 ml	24-OCT-2014 07:42	1.000	LBH	2
1400		17887.d	5.00 ml	24-OCT-2014 08:19	1.000	LBH	1
1000		17889.d	0.00 ml	24-OCT-2014 09:26	1.000	LBH	2
1000		17889d.d	0.00 ml	24-OCT-2014 09:26	1.000	LBH	2
BLANK		17890.d	5.00 ml	24-OCT-2014 09:48	1.000	LBH	81
1201		17891.d	5.00 ml	24-OCT-2014 11:04	1.000	LBH	1
1203		17892.d	5.00 ml	24-OCT-2014 11:27	1.000	LBH	2
1203		17892d.d	5.00 ml	24-OCT-2014 11:27	1.000	LBH	2
1204		17893.d	5.00 ml	24-OCT-2014 11:49	1.000	LBH	3
1204		17893d.d	5.00 ml	24-OCT-2014 11:49	1.000	LBH	3
1205		17894.d	5.00 ml	24-OCT-2014 12:12	1.000	LBH	4
1205		17894d.d	5.00 ml	24-OCT-2014 12:12	1.000	LBH	4
1206		17895.d	5.00 ml	24-OCT-2014 12:35	1.000	LBH	5
1206		17895d.d	5.00 ml	24-OCT-2014 12:35	1.000	LBH	5
1207		17896.d	5.00 ml	24-OCT-2014 12:57	1.000	LBH	6
1207		17896d.d	5.00 ml	24-OCT-2014 12:57	1.000	LBH	6
BLANK		17897.d	5.00 ml	24-OCT-2014 13:20	1.000	LBH	81
1208		17898.d	5.00 ml	24-OCT-2014 13:43	1.000	LBH	7
1208		17898d.d	5.00 ml	24-OCT-2014 13:43	1.000	LBH	7
BLANK		17899.d	5.00 ml	24-OCT-2014 14:05	1.000	LBH	81
1209		17900.d	5.00 ml	24-OCT-2014 14:28	1.000	LBH	8
1209		17900d.d	5.00 ml	24-OCT-2014 14:28	1.000	LBH	8
BLANK		17901.d	5.00 ml	24-OCT-2014 14:51	1.000	LBH	81
1600		17902.d	5.00 ml	24-OCT-2014 15:13	1.000	LBH	9
1600		17902d.d	5.00 ml	24-OCT-2014 15:13	1.000	LBH	9
1373755		17903.d	5.00 ml	24-OCT-2014 15:42	1.000	LBH	10
1373756		17904.d	5.00 ml	24-OCT-2014 16:05	1.000	LBH	11
1400		17905.d	5.00 ml	24-OCT-2014 16:30	1.000	CEK	12
LCS		17906.d	5.00 ml	24-OCT-2014 16:52	1.000	CEK	13
BLANK		17907.d	5.00 ml	24-OCT-2014 17:15	1.000	CLH	14
1373754 pH		17908.d	5.00 ml	24-OCT-2014 17:38	1.000	CLH	14
21410220501 1		17909.d	5.00 ml	24-OCT-2014 18:00	1.000	CLH	15
21410220502 1		17910.d	5.00 ml	24-OCT-2014 18:23	1.000	CLH	16
21410220503 1		17911.d	5.00 ml	24-OCT-2014 18:46	1.000	CLH	17

LABORATORY CHRONICLE: MSV DEPARTMENT

Date: 24-OCT-2014
Instrument: msv12.i
Analyst(s): LBH

Standard	Conc ppm
Int. Standard	50
Surrogate	50
8260	50
Ac/Ac/VA	250/50
CVE	50

Sample ID	Comments	DataFile	Wgt/Vol	Injection Time	Dil	Anal	ALS
21410220504 1		l7912.d	5.00 ml	24-OCT-2014 19:09	1.000	CLH	18
21410220505 1		l7913.d	5.00 ml	24-OCT-2014 19:32	1.000	CLH	19
21410220506 1		l7914.d	5.00 ml	24-OCT-2014 19:54	1.000	CLH	20
21410220507 1		l7915.d	5.00 ml	24-OCT-2014 20:17	1.000	CLH	21
21410220508 1		l7916.d	5.00 ml	24-OCT-2014 20:40	1.000	CLH	22
21410220509 1		l7917.d	5.00 ml	24-OCT-2014 21:02	1.000	CLH	23
21410220510 1		l7918.d	5.00 ml	24-OCT-2014 21:25	1.000	CLH	24
BLANK		l7919.d	5.00 ml	24-OCT-2014 21:48	1.000	CLH	25

TUNE TIME = 21:26 10-24-14

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 20000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 543548 Analytical Batch: 544527

Sample ID: MA01MW002

Contract:

SAS No.: SDG No.: 214102205

Lab Sample ID: 21410220501

Date Collected: 10/21/14 Time: 1040

Date Received: 10/22/14

Date Extracted: 10/23/14

Date Analyzed: 10/27/14 Time: 0345

Dilution Factor: 1 Analyst: DLB

Prep Method: 8330A

Analytical Method: SW-846 8330A

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 2

Lab File ID: 2141025/a2068

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
19406-51-0	4-Amino-2,6-dinitrotoluene	0.360	U	0.360	1.00
35572-78-2	2-Amino-4,6-dinitrotoluene	0.300	U	0.300	1.00
99-65-0	1,3-Dinitrobenzene	0.150	U	0.150	1.00
121-14-2	2,4-Dinitrotoluene	0.290	U	0.290	1.00
606-20-2	2,6-Dinitrotoluene	0.260	U	0.260	1.00
2691-41-0	HMX	0.130	U	0.130	1.00
98-95-3	Nitrobenzene	0.230	U	0.230	1.00
55-63-0	Nitroglycerin	0.380	U	0.380	1.00
88-72-2	2-Nitrotoluene	0.170	U	0.170	1.00
99-08-1	3-Nitrotoluene	0.330	U	0.330	1.00
99-99-0	4-Nitrotoluene	0.420	U	0.420	1.00
78-11-5	Pentaerythritol Tetranitrate	0.590	U	0.590	1.00
121-82-4	RDX	0.170	U	0.170	1.00
479-45-8	Tetryl	0.240	U	0.240	1.00
99-35-4	1,3,5-Trinitrobenzene	0.150	UQ	0.150	1.00
118-96-7	2,4,6-Trinitrotoluene	0.270	U	0.270	1.00

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 20000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 543548 Analytical Batch: 544527

Sample ID: MA01MW001

Contract:

SAS No.: SDG No.: 214102205

Lab Sample ID: 21410220503

Date Collected: 10/21/14 Time: 1220

Date Received: 10/22/14

Date Extracted: 10/23/14

Date Analyzed: 10/27/14 Time: 0423

Dilution Factor: 1 Analyst: DLB

Prep Method: 8330A

Analytical Method: SW-846 8330A

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 2

Lab File ID: 2141025/a2069

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
19406-51-0	4-Amino-2,6-dinitrotoluene	0.360	U	0.360	1.00
35572-78-2	2-Amino-4,6-dinitrotoluene	0.300	U	0.300	1.00
99-65-0	1,3-Dinitrobenzene	0.150	U	0.150	1.00
121-14-2	2,4-Dinitrotoluene	0.290	U	0.290	1.00
606-20-2	2,6-Dinitrotoluene	0.260	U	0.260	1.00
2691-41-0	HMX	0.130	U	0.130	1.00
98-95-3	Nitrobenzene	0.230	U	0.230	1.00
55-63-0	Nitroglycerin	0.380	U	0.380	1.00
88-72-2	2-Nitrotoluene	0.170	U	0.170	1.00
99-08-1	3-Nitrotoluene	0.330	U	0.330	1.00
99-99-0	4-Nitrotoluene	0.420	U	0.420	1.00
78-11-5	Pentaerythritol Tetranitrate	0.590	U	0.590	1.00
121-82-4	RDX	0.170	U	0.170	1.00
479-45-8	Tetryl	0.240	U	0.240	1.00
99-35-4	1,3,5-Trinitrobenzene	0.150	UQ	0.150	1.00
118-96-7	2,4,6-Trinitrotoluene	0.270	U	0.270	1.00

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 20000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 543548 Analytical Batch: 544527

Sample ID: MA01MW004

Contract:

SAS No.: SDG No.: 214102205

Lab Sample ID: 21410220504

Date Collected: 10/21/14 Time: 1100

Date Received: 10/22/14

Date Extracted: 10/23/14

Date Analyzed: 10/27/14 Time: 0501

Dilution Factor: 1 Analyst: DLB

Prep Method: 8330A

Analytical Method: SW-846 8330A

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 2

Lab File ID: 2141025/a2070

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
19406-51-0	4-Amino-2,6-dinitrotoluene	0.360	U	0.360	1.00
35572-78-2	2-Amino-4,6-dinitrotoluene	0.300	U	0.300	1.00
99-65-0	1,3-Dinitrobenzene	0.150	U	0.150	1.00
121-14-2	2,4-Dinitrotoluene	0.290	U	0.290	1.00
606-20-2	2,6-Dinitrotoluene	0.260	U	0.260	1.00
2691-41-0	HMX	0.130	U	0.130	1.00
98-95-3	Nitrobenzene	0.230	U	0.230	1.00
55-63-0	Nitroglycerin	0.380	U	0.380	1.00
88-72-2	2-Nitrotoluene	0.170	U	0.170	1.00
99-08-1	3-Nitrotoluene	0.330	U	0.330	1.00
99-99-0	4-Nitrotoluene	0.420	U	0.420	1.00
78-11-5	Pentaerythritol Tetranitrate	0.590	U	0.590	1.00
121-82-4	RDX	0.170	U	0.170	1.00
479-45-8	Tetryl	0.240	U	0.240	1.00
99-35-4	1,3,5-Trinitrobenzene	0.150	UQ	0.150	1.00
118-96-7	2,4,6-Trinitrotoluene	0.270	U	0.270	1.00

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 20000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 543548 Analytical Batch: 544527

Sample ID: MA01MW004-a

Contract:

SAS No.: SDG No.: 214102205

Lab Sample ID: 21410220505

Date Collected: 10/21/14 Time: 1100

Date Received: 10/22/14

Date Extracted: 10/23/14

Date Analyzed: 10/27/14 Time: 0539

Dilution Factor: 1 Analyst: DLB

Prep Method: 8330A

Analytical Method: SW-846 8330A

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 2

Lab File ID: 2141025/a2071

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
19406-51-0	4-Amino-2,6-dinitrotoluene	0.360	U	0.360	1.00
35572-78-2	2-Amino-4,6-dinitrotoluene	0.300	U	0.300	1.00
99-65-0	1,3-Dinitrobenzene	0.150	U	0.150	1.00
121-14-2	2,4-Dinitrotoluene	0.290	U	0.290	1.00
606-20-2	2,6-Dinitrotoluene	0.260	U	0.260	1.00
2691-41-0	HMX	0.130	U	0.130	1.00
98-95-3	Nitrobenzene	0.230	U	0.230	1.00
55-63-0	Nitroglycerin	0.380	U	0.380	1.00
88-72-2	2-Nitrotoluene	0.170	U	0.170	1.00
99-08-1	3-Nitrotoluene	0.330	U	0.330	1.00
99-99-0	4-Nitrotoluene	0.420	U	0.420	1.00
78-11-5	Pentaerythritol Tetranitrate	0.590	U	0.590	1.00
121-82-4	RDX	0.170	U	0.170	1.00
479-45-8	Tetryl	0.240	U	0.240	1.00
99-35-4	1,3,5-Trinitrobenzene	0.150	UQ	0.150	1.00
118-96-7	2,4,6-Trinitrotoluene	0.270	U	0.270	1.00

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 20000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 543548 Analytical Batch: 544527

Sample ID: MA01MW003

Contract:

SAS No.: SDG No.: 214102205

Lab Sample ID: 21410220507

Date Collected: 10/21/14 Time: 1226

Date Received: 10/22/14

Date Extracted: 10/23/14

Date Analyzed: 10/27/14 Time: 0616

Dilution Factor: 1 Analyst: DLB

Prep Method: 8330A

Analytical Method: SW-846 8330A

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 2

Lab File ID: 2141025/a2072

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
19406-51-0	4-Amino-2,6-dinitrotoluene	0.360	U	0.360	1.00
35572-78-2	2-Amino-4,6-dinitrotoluene	0.300	U	0.300	1.00
99-65-0	1,3-Dinitrobenzene	0.150	U	0.150	1.00
121-14-2	2,4-Dinitrotoluene	0.290	U	0.290	1.00
606-20-2	2,6-Dinitrotoluene	0.260	U	0.260	1.00
2691-41-0	HMX	0.130	U	0.130	1.00
98-95-3	Nitrobenzene	0.230	U	0.230	1.00
55-63-0	Nitroglycerin	0.380	U	0.380	1.00
88-72-2	2-Nitrotoluene	0.170	U	0.170	1.00
99-08-1	3-Nitrotoluene	0.330	U	0.330	1.00
99-99-0	4-Nitrotoluene	0.420	U	0.420	1.00
78-11-5	Pentaerythritol Tetranitrate	0.590	U	0.590	1.00
121-82-4	RDX	0.170	U	0.170	1.00
479-45-8	Tetryl	0.240	U	0.240	1.00
99-35-4	1,3,5-Trinitrobenzene	0.150	UQ	0.150	1.00
118-96-7	2,4,6-Trinitrotoluene	0.270	U	0.270	1.00

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 20000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 543732 Analytical Batch: 544858

Sample ID: M114MW002

Contract:

SAS No.: SDG No.: 214102205

Lab Sample ID: 21410220509

Date Collected: 10/22/14 Time: 0935

Date Received: 10/23/14

Date Extracted: 10/25/14

Date Analyzed: 10/30/14 Time: 1726

Dilution Factor: 1 Analyst: DLB

Prep Method: 8330A

Analytical Method: SW-846 8330A

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 2

Lab File ID: 2141030/a2006

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
19406-51-0	4-Amino-2,6-dinitrotoluene	0.360	U	0.360	1.00
35572-78-2	2-Amino-4,6-dinitrotoluene	0.300	U	0.300	1.00
99-65-0	1,3-Dinitrobenzene	0.150	U	0.150	1.00
121-14-2	2,4-Dinitrotoluene	0.290	U	0.290	1.00
606-20-2	2,6-Dinitrotoluene	0.260	U	0.260	1.00
2691-41-0	HMX	0.130	U	0.130	1.00
98-95-3	Nitrobenzene	0.230	U	0.230	1.00
55-63-0	Nitroglycerin	0.380	U	0.380	1.00
88-72-2	2-Nitrotoluene	0.170	U	0.170	1.00
99-08-1	3-Nitrotoluene	0.330	U	0.330	1.00
99-99-0	4-Nitrotoluene	0.420	U	0.420	1.00
78-11-5	Pentaerythritol Tetranitrate	0.590	U	0.590	1.00
121-82-4	RDX	0.170	U	0.170	1.00
479-45-8	Tetryl	0.240	U	0.240	1.00
99-35-4	1,3,5-Trinitrobenzene	0.150	UQ	0.150	1.00
118-96-7	2,4,6-Trinitrotoluene	0.270	U	0.270	1.00

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 20000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 543732 Analytical Batch: 544872

Sample ID: M114MW003

Contract:

SAS No.: SDG No.: 214102205

Lab Sample ID: 21410220511

Date Collected: 10/22/14 Time: 1110

Date Received: 10/23/14

Date Extracted: 10/25/14

Date Analyzed: 11/05/14 Time: 1444

Dilution Factor: 20 Analyst: DLB

Prep Method: 8330A

Analytical Method: SW-846 8330A

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 2

Lab File ID: 2141105/a2010

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
19406-51-0	4-Amino-2,6-dinitrotoluene	7.20	U	7.20	20.0
35572-78-2	2-Amino-4,6-dinitrotoluene	6.00	U	6.00	20.0
99-65-0	1,3-Dinitrobenzene	3.00	U	3.00	20.0
121-14-2	2,4-Dinitrotoluene	5.80	U	5.80	20.0
606-20-2	2,6-Dinitrotoluene	5.20	U	5.20	20.0
2691-41-0	HMX	2.60	U	2.60	20.0
98-95-3	Nitrobenzene	367		4.60	20.0
55-63-0	Nitroglycerin	7.60	U	7.60	20.0
88-72-2	2-Nitrotoluene	3.40	U	3.40	20.0
99-08-1	3-Nitrotoluene	6.60	U	6.60	20.0
99-99-0	4-Nitrotoluene	8.40	U	8.40	20.0
78-11-5	Pentaerythritol Tetranitrate	11.8	U	11.8	20.0
121-82-4	RDX	3.40	U	3.40	20.0
479-45-8	Tetryl	4.80	U	4.80	20.0
99-35-4	1,3,5-Trinitrobenzene	3.00	UQ	3.00	20.0
118-96-7	2,4,6-Trinitrotoluene	5.40	U	5.40	20.0

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 20000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 543732 Analytical Batch: 544872

CONCENTRATION UNITS: ug/L

Sample ID: M114MW004

Contract:

SAS No.: SDG No.: 214102205

Lab Sample ID: 21410220512

Date Collected: 10/22/14 Time: 1025

Date Received: 10/23/14

Date Extracted: 10/25/14

Date Analyzed: 11/05/14 Time: 1329

Dilution Factor: 1 Analyst: DLB

Prep Method: 8330A

Analytical Method: SW-846 8330A

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 2

Lab File ID: 2141105/a2008

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
19406-51-0	4-Amino-2,6-dinitrotoluene	0.360	U	0.360	1.00
35572-78-2	2-Amino-4,6-dinitrotoluene	0.300	U	0.300	1.00
99-65-0	1,3-Dinitrobenzene	0.150	U	0.150	1.00
121-14-2	2,4-Dinitrotoluene	0.290	U	0.290	1.00
606-20-2	2,6-Dinitrotoluene	0.260	U	0.260	1.00
2691-41-0	HMX	0.130	U	0.130	1.00
98-95-3	Nitrobenzene	12.3		0.230	1.00
55-63-0	Nitroglycerin	0.380	U	0.380	1.00
88-72-2	2-Nitrotoluene	0.170	U	0.170	1.00
99-08-1	3-Nitrotoluene	0.330	U	0.330	1.00
99-99-0	4-Nitrotoluene	0.420	U	0.420	1.00
78-11-5	Pentaerythritol Tetranitrate	0.590	U	0.590	1.00
121-82-4	RDX	0.170	U	0.170	1.00
479-45-8	Tetryl	0.240	U	0.240	1.00
99-35-4	1,3,5-Trinitrobenzene	0.150	UQ	0.150	1.00
118-96-7	2,4,6-Trinitrotoluene	0.270	U	0.270	1.00

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 20000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 543732 Analytical Batch: 544872

Sample ID: M114MW001

Contract:

SAS No.: SDG No.: 214102205

Lab Sample ID: 21410220514

Date Collected: 10/22/14 Time: 1235

Date Received: 10/23/14

Date Extracted: 10/25/14

Date Analyzed: 11/05/14 Time: 1406

Dilution Factor: 1 Analyst: DLB

Prep Method: 8330A

Analytical Method: SW-846 8330A

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 2

Lab File ID: 2141105/a2009

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
19406-51-0	4-Amino-2,6-dinitrotoluene	0.360	U	0.360	1.00
35572-78-2	2-Amino-4,6-dinitrotoluene	0.300	U	0.300	1.00
99-65-0	1,3-Dinitrobenzene	0.150	U	0.150	1.00
121-14-2	2,4-Dinitrotoluene	0.290	U	0.290	1.00
606-20-2	2,6-Dinitrotoluene	0.260	U	0.260	1.00
2691-41-0	HMX	0.130	U	0.130	1.00
98-95-3	Nitrobenzene	3.02		0.230	1.00
55-63-0	Nitroglycerin	0.380	U	0.380	1.00
88-72-2	2-Nitrotoluene	0.170	U	0.170	1.00
99-08-1	3-Nitrotoluene	0.330	U	0.330	1.00
99-99-0	4-Nitrotoluene	0.420	U	0.420	1.00
78-11-5	Pentaerythritol Tetranitrate	0.590	U	0.590	1.00
121-82-4	RDX	0.170	U	0.170	1.00
479-45-8	Tetryl	0.240	U	0.240	1.00
99-35-4	1,3,5-Trinitrobenzene	0.150	UQ	0.150	1.00
118-96-7	2,4,6-Trinitrotoluene	0.270	U	0.270	1.00

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 20000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 543732 Analytical Batch: 544858

CONCENTRATION UNITS: ug/L

Sample ID: MWQ-24

Contract:

SAS No.: SDG No.: 214102205

Lab Sample ID: 21410220515

Date Collected: 10/23/14 Time: 0932

Date Received: 10/24/14

Date Extracted: 10/25/14

Date Analyzed: 10/30/14 Time: 1958

Dilution Factor: 1 Analyst: DLB

Prep Method: 8330A

Analytical Method: SW-846 8330A

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 2

Lab File ID: 2141030/a2010

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
19406-51-0	4-Amino-2,6-dinitrotoluene	0.360	U	0.360	1.00
35572-78-2	2-Amino-4,6-dinitrotoluene	0.300	U	0.300	1.00
99-65-0	1,3-Dinitrobenzene	0.150	U	0.150	1.00
121-14-2	2,4-Dinitrotoluene	0.290	U	0.290	1.00
606-20-2	2,6-Dinitrotoluene	0.260	U	0.260	1.00
2691-41-0	HMX	0.130	U	0.130	1.00
55-63-0	Nitroglycerin	0.380	U	0.380	1.00
88-72-2	2-Nitrotoluene	0.170	U	0.170	1.00
99-08-1	3-Nitrotoluene	0.330	U	0.330	1.00
99-99-0	4-Nitrotoluene	0.420	U	0.420	1.00
78-11-5	Pentaerythritol Tetranitrate	0.590	U	0.590	1.00
121-82-4	RDX	0.170	U	0.170	1.00
479-45-8	Tetryl	0.240	U	0.240	1.00
99-35-4	1,3,5-Trinitrobenzene	0.150	UQ	0.150	1.00
118-96-7	2,4,6-Trinitrotoluene	0.270	U	0.270	1.00

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 20000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 543732 Analytical Batch: 544872

CONCENTRATION UNITS: ug/L

Sample ID: MWQ-24DL

Contract:

SAS No.: SDG No.: 214102205

Lab Sample ID: 21410220515DL

Date Collected: 10/23/14 Time: 0932

Date Received: 10/24/14

Date Extracted: 10/25/14

Date Analyzed: 11/05/14 Time: 1637

Dilution Factor: 20 Analyst: DLB

Prep Method: 8330A

Analytical Method: SW-846 8330A

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 2

Lab File ID: 2141105/a2013

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
98-95-3	Nitrobenzene	375		4.60	20.0

FORM I ORG-1

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 20000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 543732 Analytical Batch: 544858

Sample ID: MWQ-24-ms

Contract:

SAS No.: SDG No.: 214102205

Lab Sample ID: 21410220516

Date Collected: 10/23/14 Time: 0932

Date Received: 10/24/14

Date Extracted: 10/25/14

Date Analyzed: 10/30/14 Time: 2036

Dilution Factor: 1 Analyst: DLB

Prep Method: 8330A

Analytical Method: SW-846 8330A

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 2

Lab File ID: 2141030/a2011

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
19406-51-0	4-Amino-2,6-dinitrotoluene	3.17		0.360	1.00
35572-78-2	2-Amino-4,6-dinitrotoluene	3.05		0.300	1.00
99-65-0	1,3-Dinitrobenzene	2.81		0.150	1.00
121-14-2	2,4-Dinitrotoluene	3.58		0.290	1.00
606-20-2	2,6-Dinitrotoluene	3.30		0.260	1.00
2691-41-0	HMX	6.69		0.130	1.00
98-95-3	Nitrobenzene	11.4		0.230	1.00
55-63-0	Nitroglycerin	3.85		0.380	1.00
88-72-2	2-Nitrotoluene	3.66		0.170	1.00
99-08-1	3-Nitrotoluene	3.79		0.330	1.00
99-99-0	4-Nitrotoluene	4.30		0.420	1.00
78-11-5	Pentaerythritol Tetranitrate	3.61		0.590	1.00
121-82-4	RDX	23.2		0.170	1.00
479-45-8	Tetryl	0.240	U	0.240	1.00
99-35-4	1,3,5-Trinitrobenzene	3.97		0.150	1.00
118-96-7	2,4,6-Trinitrotoluene	2.50		0.270	1.00

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 20000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 543732 Analytical Batch: 544858

CONCENTRATION UNITS: *ug/L*

Sample ID: MWQ-24-sd

Contract:

SAS No.: SDG No.: 214102205

Lab Sample ID: 21410220517

Date Collected: 10/23/14 Time: 0932

Date Received: 10/24/14

Date Extracted: 10/25/14

Date Analyzed: 10/30/14 Time: 2114

Dilution Factor: 1 Analyst: DLB

Prep Method: 8330A

Analytical Method: SW-846 8330A

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 2

Lab File ID: 2141030/a2012

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
19406-51-0	4-Amino-2,6-dinitrotoluene	2.74		0.360	1.00
35572-78-2	2-Amino-4,6-dinitrotoluene	3.05		0.300	1.00
99-65-0	1,3-Dinitrobenzene	2.39		0.150	1.00
121-14-2	2,4-Dinitrotoluene	3.64		0.290	1.00
606-20-2	2,6-Dinitrotoluene	3.00		0.260	1.00
2691-41-0	HMX	10.8		0.130	1.00
98-95-3	Nitrobenzene	2.93		0.230	1.00
55-63-0	Nitroglycerin	3.04		0.380	1.00
88-72-2	2-Nitrotoluene	3.42		0.170	1.00
99-08-1	3-Nitrotoluene	3.21		0.330	1.00
99-99-0	4-Nitrotoluene	3.28		0.420	1.00
78-11-5	Pentaerythritol Tetranitrate	4.11		0.590	1.00
121-82-4	RDX	3.70		0.170	1.00
479-45-8	Tetryl	0.240	U	0.240	1.00
99-35-4	1,3,5-Trinitrobenzene	1.49		0.150	1.00
118-96-7	2,4,6-Trinitrotoluene	2.75		0.270	1.00

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 20000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 543732 Analytical Batch: 544858

Sample ID: MA02MW001D

Contract:

SAS No.: SDG No.: 214102205

Lab Sample ID: 21410220520

Date Collected: 10/23/14 Time: 1143

Date Received: 10/24/14

Date Extracted: 10/25/14

Date Analyzed: 10/30/14 Time: 2151

Dilution Factor: 1 Analyst: DLB

Prep Method: 8330A

Analytical Method: SW-846 8330A

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 2

Lab File ID: 2141030/a2013

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
19406-51-0	4-Amino-2,6-dinitrotoluene	0.360	U	0.360	1.00
35572-78-2	2-Amino-4,6-dinitrotoluene	0.300	U	0.300	1.00
99-65-0	1,3-Dinitrobenzene	0.150	U	0.150	1.00
121-14-2	2,4-Dinitrotoluene	0.290	U	0.290	1.00
606-20-2	2,6-Dinitrotoluene	0.260	U	0.260	1.00
2691-41-0	HMX	0.130	U	0.130	1.00
98-95-3	Nitrobenzene	0.230	U	0.230	1.00
55-63-0	Nitroglycerin	0.380	U	0.380	1.00
88-72-2	2-Nitrotoluene	0.170	U	0.170	1.00
99-08-1	3-Nitrotoluene	0.330	U	0.330	1.00
99-99-0	4-Nitrotoluene	0.420	U	0.420	1.00
78-11-5	Pentaerythritol Tetranitrate	0.590	U	0.590	1.00
121-82-4	RDX	0.170	U	0.170	1.00
479-45-8	Tetryl	0.240	U	0.240	1.00
99-35-4	1,3,5-Trinitrobenzene	0.150	UQ	0.150	1.00
118-96-7	2,4,6-Trinitrotoluene	0.270	U	0.270	1.00

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 20000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 543548 Analytical Batch: 544527

CONCENTRATION UNITS: ug/L

Sample ID: MB1372721

Contract:

SAS No.: SDG No.: 214102205

Lab Sample ID: 1372721

Date Collected: Time:

Date Received:

Date Extracted: 10/23/14

Date Analyzed: 10/27/14 Time: 0151

Dilution Factor: 1 Analyst: DLB

Prep Method: 8330A

Analytical Method: SW-846 8330A

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 2

Lab File ID: 2141025/a2065

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
2691-41-0	HMX	0.130	U	0.130	1.00
121-82-4	RDX	0.170	U	0.170	1.00
99-35-4	1,3,5-Trinitrobenzene	0.150	U	0.150	1.00
99-65-0	1,3-Dinitrobenzene	0.150	U	0.150	1.00
479-45-8	Tetryl	0.240	U	0.240	1.00
98-95-3	Nitrobenzene	0.230	U	0.230	1.00
118-96-7	2,4,6-Trinitrotoluene	0.270	U	0.270	1.00
19406-51-0	4-Amino-2,6-dinitrotoluene	0.360	U	0.360	1.00
35572-78-2	2-Amino-4,6-dinitrotoluene	0.300	U	0.300	1.00
121-14-2	2,4-Dinitrotoluene	0.290	U	0.290	1.00
606-20-2	2,6-Dinitrotoluene	0.260	U	0.260	1.00
88-72-2	2-Nitrotoluene	0.170	U	0.170	1.00
99-08-1	3-Nitrotoluene	0.330	U	0.330	1.00
99-99-0	4-Nitrotoluene	0.420	U	0.420	1.00
55-63-0	Nitroglycerin	0.380	U	0.380	1.00
78-11-5	Pentaerythritol Tetranitrate	0.590	U	0.590	1.00

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 1000 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: ID: (mm)

Concentrated Extract Volume: 20000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 543732 Analytical Batch: 544858

CONCENTRATION UNITS: ug/L

Sample ID: MB1373819

Contract:

SAS No.: SDG No.: 214102205

Lab Sample ID: 1373819

Date Collected: Time:

Date Received:

Date Extracted: 10/25/14

Date Analyzed: 10/30/14 Time: 1533

Dilution Factor: 1 Analyst: DLB

Prep Method: 8330A

Analytical Method: SW-846 8330A

Sulfur Cleanup: (Y/N) N Instrument ID: HPLC 2

Lab File ID: 2141030/a2003

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
2691-41-0	HMX	0.130	U	0.130	1.00
121-82-4	RDX	0.170	U	0.170	1.00
99-35-4	1,3,5-Trinitrobenzene	0.150	U	0.150	1.00
99-65-0	1,3-Dinitrobenzene	0.150	U	0.150	1.00
479-45-8	Tetryl	0.240	U	0.240	1.00
98-95-3	Nitrobenzene	0.230	U	0.230	1.00
118-96-7	2,4,6-Trinitrotoluene	0.270	U	0.270	1.00
19406-51-0	4-Amino-2,6-dinitrotoluene	0.360	U	0.360	1.00
35572-78-2	2-Amino-4,6-dinitrotoluene	0.300	U	0.300	1.00
121-14-2	2,4-Dinitrotoluene	0.290	U	0.290	1.00
606-20-2	2,6-Dinitrotoluene	0.260	U	0.260	1.00
88-72-2	2-Nitrotoluene	0.170	U	0.170	1.00
99-08-1	3-Nitrotoluene	0.330	U	0.330	1.00
99-99-0	4-Nitrotoluene	0.420	U	0.420	1.00
55-63-0	Nitroglycerin	0.380	U	0.380	1.00
78-11-5	Pentaerythritol Tetranitrate	0.590	U	0.590	1.00

2E

ORGANIC SURROGATE RECOVERY

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

GC Column (1): ID: (mm) GC Cloumn (2): ID: (mm)

Method: SW-846 8330A

	EPA SAMPLE NO.	SMC1 1-(1)	Lo	Hi	F	SMC2 2	Lo	Hi	F	SMC3 3	Lo	Hi	F	SMC4 4	Lo	Hi	F	TOT OUT
1.	MA01MW002	61	60	140														0
2.	MA01MW001	76	60	140														0
3.	MA01MW004	68	60	140														0
4.	MA01MW004-a	68	60	140														0
5.	MA01MW003	78	60	140														0
6.	M114MW002	92	60	140														0
7.	M114MW003	0	60	140	D													0
8.	M114MW004	86	60	140														0
9.	M114MW001	83	60	140														0
10.	MWQ-24	76	60	140														0
11.	MWQ-24DL	0	60	140	D													0
12.	MWQ-24-ms	80	60	140														0
13.	MWQ-24-sd	84	60	140														0
14.	MA02MW001D	85	60	140														0
15.	MB1372721	75	60	140														0
16.	LCSD1372723	89	60	140														0
17.	MB1373819	90	60	140														0
18.	LCS1373820	98	60	140														0
19.	LCSD1373821	63	60	140														0
20.	LCS1372722	110	60	140														0

SMC 1 : 1,2-Dinitrobenzene SMC 2 :

SMC 3 : SMC 4 :

Column to be used to flag recovery limits

* Value outside of contract required limits

D Surrogate diluted out

3E

WATER ORGANICS LCS/LCSD RECOVERY

Lab Name: GCAL

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Contract: Method: SW-846 8330A

Prep Batch: 543548 Analytical Batch: 545021

SAMPLE NO : 1372722 COMPOUND	UNITS	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS % REC	LCS % REC FLAG	QC. LIMITS
1,3,5-Trinitrobenzene	ug/L	4	0	.689	17	*	65 - 140
1,3-Dinitrobenzene	ug/L	4	0	3.69	92		45 - 160
2,4,6-Trinitrotoluene	ug/L	4	0	3.22	81		50 - 145
2,4-Dinitrotoluene	ug/L	4	0	3.57	89		60 - 135
2,6-Dinitrotoluene	ug/L	4	0	3.66	92		60 - 135
2-Amino-4,6-dinitrotoluene	ug/L	4	0	3.83	96		50 - 155
2-Nitrotoluene	ug/L	4	0	3.37	84		45 - 135
3-Nitrotoluene	ug/L	8	0	8.62	108		50 - 130
4-Amino-2,6-dinitrotoluene	ug/L	4	0	3.8	95		55 - 155
4-Nitrotoluene	ug/L	4	0	3.01	75		50 - 130
HMX	ug/L	4	0	3.92	98		80 - 115
Nitrobenzene	ug/L	4	0	3.9	98		50 - 140
Nitroglycerin	ug/L	4	0	2.87	72		40 - 140
Pentaerythritol Tetranitrate	ug/L	8	0	8.62	108		40 - 140
RDX	ug/L	4	0	3.83	96		50 - 160
Tetryl	ug/L	4	0	2.55	64		20 - 175

RPD : 0 out of 16 outside limits

Spike Recovery: 2 out of 32 outside limits

3E

WATER ORGANICS LCS/LCSD RECOVERY

Lab Name: GCAL

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Contract: Method: SW-846 8330A

Prep Batch: 543548 Analytical Batch: 545021

SAMPLE NO : ***1372723***

COMPOUND	*UNITS*	*SPIKE ADDED*	*LCSD CONC.*	*LCSD % REC*	*REC FLAG*	*% RPD*	*RPD FLAG*	*QC. LIMITS REC*	*RPD*
1,3,5-Trinitrobenzene	ug/L	4	.894	22	*	26		65 - 140	0 - 30
1,3-Dinitrobenzene	ug/L	4	2.88	72		25		45 - 160	0 - 30
2,4,6-Trinitrotoluene	ug/L	4	3.15	79		2		50 - 145	0 - 30
2,4-Dinitrotoluene	ug/L	4	3.18	80		12		60 - 135	0 - 30
2,6-Dinitrotoluene	ug/L	4	2.88	72		24		60 - 135	0 - 30
2-Amino-4,6-dinitrotoluene	ug/L	4	3.35	84		13		50 - 155	0 - 30
2-Nitrotoluene	ug/L	4	2.52	63		29		45 - 135	0 - 30
3-Nitrotoluene	ug/L	8	7.42	93		15		50 - 130	0 - 30
4-Amino-2,6-dinitrotoluene	ug/L	4	3.18	80		18		55 - 155	0 - 30
4-Nitrotoluene	ug/L	4	3.35	84		11		50 - 130	0 - 30
HMX	ug/L	4	3.73	93		5		80 - 115	0 - 30
Nitrobenzene	ug/L	4	3.47	87		12		50 - 140	0 - 30
Nitroglycerin	ug/L	4	2.89	72		.7		40 - 140	0 - 30
Pentaerythritol Tetranitrate	ug/L	8	7.42	93		15		40 - 140	0 - 30
RDX	ug/L	4	3.33	83		14		50 - 160	0 - 30
Tetryl	ug/L	4	2.27	57		12		20 - 175	0 - 30

RPD : 0 out of 16 outside limits

Spike Recovery: 2 out of 32 outside limits

3E

WATER ORGANICS MS/MSD RECOVERY

Lab Name: GCAL Sample ID MWQ-24

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Contract: Method: SW-846 8330A

Prep Batch: 543732 Analytical Batch: 544858

SAMPLE NO : 21410220516

COMPOUND	*UNITS*	*SPIKE ADDED*	*SAMPLE CONCENTRATION*	*MS CONCENTRATION*	*MS % REC*	*MS % REC FLAG*	*QC. LIMITS*
1,3,5-Trinitrobenzene	ug/L	4	0	3.97	99		65 - 140
1,3-Dinitrobenzene	ug/L	4	0	2.81	70		45 - 160
2,4,6-Trinitrotoluene	ug/L	4	0	2.5	63		50 - 145
2,4-Dinitrotoluene	ug/L	4	0	3.58	90		60 - 135
2,6-Dinitrotoluene	ug/L	4	0	3.3	83		60 - 135
2-Amino-4,6-dinitrotoluene	ug/L	4	0	3.05	76		50 - 155
2-Nitrotoluene	ug/L	4	0	3.66	92		45 - 135
3-Nitrotoluene	ug/L	4	0	3.79	95		50 - 130
4-Amino-2,6-dinitrotoluene	ug/L	4	0	3.17	79		55 - 155
4-Nitrotoluene	ug/L	4	0	4.3	108		50 - 130
HMX	ug/L	4	0	6.69	167	*	80 - 115
Nitrobenzene	ug/L	4	353	11.4	-8540	*	50 - 140
Nitroglycerin	ug/L	4	0	3.85	96		40 - 140
Pentaerythritol Tetranitrate	ug/L	4	0	3.61	90		40 - 140
RDX	ug/L	4	0	23.2	580	*	50 - 160
Tetryl	ug/L	4	0	.129	3	*	20 - 175

RPD : 4 out of 16 outside limits

Spike Recovery: 8 out of 32 outside limits

3E
WATER ORGANICS MS/MSD RECOVERY

Lab Name: GCAL Sample ID MWQ-24

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Contract: Method: SW-846 8330A

Prep Batch: 543732 Analytical Batch: 544858

SAMPLE NO : 21410220517

COMPOUND	*UNITS*	*SPIKE ADDED*	*MSD CONC.*	*MSD % REC*	*REC FLAG*	*% RPD*	*RPD FLAG*	*QC. LIMITS REC*	*RPD*
1,3,5-Trinitrobenzene	ug/L	4	1.49	37	*	91	*	65 - 140	0 - 30
1,3-Dinitrobenzene	ug/L	4	2.39	60		16		45 - 160	0 - 30
2,4,6-Trinitrotoluene	ug/L	4	2.75	69		10		50 - 145	0 - 30
2,4-Dinitrotoluene	ug/L	4	3.64	91		2		60 - 135	0 - 30
2,6-Dinitrotoluene	ug/L	4	3	75		10		60 - 135	0 - 30
2-Amino-4,6-dinitrotoluene	ug/L	4	3.05	76		0		50 - 155	0 - 30
2-Nitrotoluene	ug/L	4	3.42	86		7		45 - 135	0 - 30
3-Nitrotoluene	ug/L	4	3.21	80		17		50 - 130	0 - 30
4-Amino-2,6-dinitrotoluene	ug/L	4	2.74	69		15		55 - 155	0 - 30
4-Nitrotoluene	ug/L	4	3.28	82		27		50 - 130	0 - 30
HMX	ug/L	4	10.8	270	*	47	*	80 - 115	0 - 30
Nitrobenzene	ug/L	4	2.93	-8750	*	118	*	50 - 140	0 - 30
Nitroglycerin	ug/L	4	3.04	76		24		40 - 140	0 - 30
Pentaerythritol Tetranitrate	ug/L	4	4.11	103		13		40 - 140	0 - 30
RDX	ug/L	4	3.7	93		145	*	50 - 160	0 - 30
Tetryl	ug/L	4	.154	4	*	18		20 - 175	0 - 30

RPD : 4 out of 16 outside limits

Spike Recovery: 8 out of 32 outside limits

3E

WATER ORGANICS LCS/LCSD RECOVERY

Lab Name: GCAL

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Contract: Method: SW-846 8330A

Prep Batch: 543732 Analytical Batch: 544858

SAMPLE NO : 1373820

COMPOUND	*UNITS*	*SPIKE ADDED*	*SAMPLE CONCENTRATION*	*LCS CONCENTRATION*	*LCS % REC*	*LCS % REC FLAG*	*QC. LIMITS*
1,3,5-Trinitrobenzene	ug/L	4	0	3.54	89		65 - 140
1,3-Dinitrobenzene	ug/L	4	0	2.56	64		45 - 160
2,4,6-Trinitrotoluene	ug/L	4	0	2.9	73		50 - 145
2,4-Dinitrotoluene	ug/L	4	0	3.73	93		60 - 135
2,6-Dinitrotoluene	ug/L	4	0	3.36	84		60 - 135
2-Amino-4,6-dinitrotoluene	ug/L	4	0	2.34	59		50 - 155
2-Nitrotoluene	ug/L	4	0	3.33	83		45 - 135
3-Nitrotoluene	ug/L	4	0	3.38	85		50 - 130
4-Amino-2,6-dinitrotoluene	ug/L	4	0	3.66	92		55 - 155
4-Nitrotoluene	ug/L	4	0	3.55	89		50 - 130
HMX	ug/L	4	0	3.66	92		80 - 115
Nitrobenzene	ug/L	4	0	3.41	85		50 - 140
Nitroglycerin	ug/L	4	0	3.1	78		40 - 140
Pentaerythritol Tetranitrate	ug/L	4	0	2.7	68		40 - 140
RDX	ug/L	4	0	2.96	74		50 - 160
Tetryl	ug/L	4	0	1	25		20 - 175

RPD : 1 out of 16 outside limits

Spike Recovery: 1 out of 32 outside limits

3E

WATER ORGANICS LCS/LCSD RECOVERY

Lab Name: GCAL

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Contract: Method: SW-846 8330A

Prep Batch: 543732 Analytical Batch: 544858

SAMPLE NO : ***1373821***

COMPOUND	*UNITS*	*SPIKE ADDED*	*LCSD CONC.*	*LCSD % REC*	*REC FLAG*	*% RPD*	*RPD FLAG*	*QC. LIMITS REC*	*RPD*
1,3,5-Trinitrobenzene	ug/L	4	1.99	50	*	56	*	65 - 140	0 - 30
1,3-Dinitrobenzene	ug/L	4	2.49	62		3		45 - 160	0 - 30
2,4,6-Trinitrotoluene	ug/L	4	2.28	57		24		50 - 145	0 - 30
2,4-Dinitrotoluene	ug/L	4	3.03	76		21		60 - 135	0 - 30
2,6-Dinitrotoluene	ug/L	4	2.78	70		19		60 - 135	0 - 30
2-Amino-4,6-dinitrotoluene	ug/L	4	3.01	75		25		50 - 155	0 - 30
2-Nitrotoluene	ug/L	4	3.05	76		9		45 - 135	0 - 30
3-Nitrotoluene	ug/L	4	3.03	76		11		50 - 130	0 - 30
4-Amino-2,6-dinitrotoluene	ug/L	4	3.28	82		11		55 - 155	0 - 30
4-Nitrotoluene	ug/L	4	3.1	78		14		50 - 130	0 - 30
HMX	ug/L	4	3.49	87		5		80 - 115	0 - 30
Nitrobenzene	ug/L	4	2.7	68		23		50 - 140	0 - 30
Nitroglycerin	ug/L	4	2.53	63		20		40 - 140	0 - 30
Pentaerythritol Tetranitrate	ug/L	4	2.74	69		1		40 - 140	0 - 30
RDX	ug/L	4	2.86	72		3		50 - 160	0 - 30
Tetryl	ug/L	4	.885	22		12		20 - 175	0 - 30

RPD : 1 out of 16 outside limits

Spike Recovery: 1 out of 32 outside limits

4C

ORGANIC METHOD BLANK SUMMARY

Lab Name: GCAL

Lab Code: LA024 Case No.:

Lab Sample ID: 1372721

Matrix: Water Sulfur Cleanup: (Y/N) N

Date Analyzed (1): 10/27/14 Time (1): 0151

Instrument ID (1): HPLC 2

GC Column (1): ID: (mm)

Method: SW-846 8330A

Lab File ID: 2141025/a2065

Sample ID: MB1372721

Contract:

SAS No.: SDG No.: 214102205

Date Extracted: 10/23/14

Date Analyzed (2): Time (2):

Instrument ID (2):

GC Column (2): ID: (mm)

Prep Batch: 543548 Analytical Batch: 544527

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES

	SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	INSTRUMENT ID
1.	MA01MW002	21410220501	10/27/14	0345	HPLC2
2.	MA01MW001	21410220503	10/27/14	0423	HPLC2
3.	MA01MW004	21410220504	10/27/14	0501	HPLC2
4.	MA01MW004-a	21410220505	10/27/14	0539	HPLC2
5.	MA01MW003	21410220507	10/27/14	0616	HPLC2
6.	LCS1372722	1372722	11/11/14	1801	HPLC2
7.	LCSD1372723	1372723	11/11/14	1903	HPLC2

4C

ORGANIC METHOD BLANK SUMMARY

Lab Name: GCAL
Sample ID: MB1373819

Lab Code: LA024 Case No.:
Contract:

Lab Sample ID: 1373819
SAS No.: SDG No.: 214102205

Matrix: Water Sulfur Cleanup: (Y/N) N
Date Extracted: 10/25/14

Date Analyzed (1): 10/30/14 Time (1): 1533
Date Analyzed (2): Time (2):

Instrument ID (1): HPLC 2
Instrument ID (2):

GC Column (1): ID: (mm)
GC Column (2): ID: (mm)

Method: SW-846 8330A
Prep Batch: 543732 Analytical Batch: 544858

Lab File ID: 2141030/a2003

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES

	SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	INSTRUMENT ID
1.	LCS1373820	1373820	10/30/14	1611	HPLC2
2.	LCSD1373821	1373821	10/30/14	1649	HPLC2
3.	M114MW002	21410220509	10/30/14	1726	HPLC2
4.	MWQ-24	21410220515	10/30/14	1958	HPLC2
5.	MWQ-24-ms	21410220516	10/30/14	2036	HPLC2
6.	MWQ-24-sd	21410220517	10/30/14	2114	HPLC2
7.	MA02MW001D	21410220520	10/30/14	2151	HPLC2
8.	M114MW004	21410220512	11/05/14	1329	HPLC2
9.	M114MW001	21410220514	11/05/14	1406	HPLC2
10.	M114MW003	21410220511	11/05/14	1444	HPLC2
11.	MWQ-24DL	21410220515DL	11/05/14	1637	HPLC2

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-OCT-2014 19:56
End Cal Date : 24-OCT-2014 23:04
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /var/chem/hplc2.i/2141025.b/lc8-8330B.m
Cal Date : 06-Nov-2014 11:07 dlb
Curve Type : Average

Calibration File Names:
Level 2: /var/chem/hplc2.i/2141024p.b/a2008.d
Level 3: /var/chem/hplc2.i/2141024p.b/a2007.d
Level 4: /var/chem/hplc2.i/2141024p.b/a2006.d
Level 5: /var/chem/hplc2.i/2141024p.b/a2005.d
Level 6: /var/chem/hplc2.i/2141024p.b/a2004.d
Level 7: /var/chem/hplc2.i/2141024p.b/a2003.d

Compound	50.000 Level 2	100.000 Level 3	200.000 Level 4	500.000 Level 5	750.000 Level 6	1000.000 Level 7	RRF	% RSD
1 HMX	375	438	423	345	364	361	384	9.708
2 RDX	307	389	304	335	458	332	354	16.739
3 1,3,5-TNB	696	621	619	616	660	595	635	5.797
5 1,3-DNB	401	396	345	354	379	355	372	6.374
6 Nitrobenzene	446	384	309	319	325	294	346	16.656
7 Tetryl	504	437	471	462	459	426	460	5.950
8 2,4,6-TNT	594	458	445	622	473	440	505	15.993
9 3,5-Dinitroaniline	608	524	534	606	571	514	560	7.436
10 Nitroglycerin	101	159	169	161	157	150	150	16.307
11 2,4-DNT	287	324	310	336	325	310	315	5.484
12 2,6-DNT	430	439	414	398	391	369	407	6.380
13 4-Am-26DNT	443	426	429	451	428	392	428	4.685
14 2-Am-46DNT	491	500	391	377	369	383	418	14.390
15 2-NT	450	383	394	377	374	368	391	7.712
16 4-NT	280	296	331	298	291	285	297	6.033
17 3-NT	482	531	446	444	416	428	458	9.249
18 PETN	135	162	201	172	170	164	167	12.658
$ 4 1,2-Dinitrobenzene	477	425	372	402	433	387	416	9.031

Data File: /var/chem/hplc2.i/2141024p.b/a2009.d
Report Date: 13-Nov-2014 14:54

GCAL, Inc.

RECOVERY REPORT

Client Name: 53-53-12
Sample Matrix: LIQUID
Lab Smp Id: 1600
Level: LOW
Data Type: LC DATA
SpikeList File: icv.spk
Sublist File: all.sub
Method File: /var/chem/hplc2.i/2141024p.b/lc8-8330B.m
Misc Info:

Client SDG: 2141024p
Fraction: OTHER

Operator: dlb
SampleType: LCS
Quant Type: ESTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
1 HMX	0.200	0.202	101.05	85-115
2 RDX	0.200	0.174	87.03	85-115
3 1,3,5-TNB	0.200	0.176	88.06	85-115
5 1,3-DNB	0.200	0.176	88.25	85-115
6 Nitrobenzene	0.200	0.196	98.20	85-115
7 Tetryl	0.200	0.210	104.78	85-115
8 2,4,6-TNT	0.200	0.175	87.74	85-115
9 3,5-Dinitroaniline	0.200	0.200	100.07	85-115
10 Nitroglycerin	0.200	0.223	111.71	85-115
11 2,4-DNT	0.200	0.187	93.45	85-115
12 2,6-DNT	0.200	0.179	89.52	85-115
15 2-NT	0.200	0.190	95.04	85-115
16 4-NT	0.200	0.220	109.95	85-115
17 3-NT	0.200	0.205	102.33	85-115
18 PETN	0.200	0.174	87.22	85-115
14 2-Am-46DNT	0.200	0.201	100.59	85-115
13 4-Am-26DNT	0.200	0.222	110.89	85-115

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 1,2-Dinitrobenzene	0.200	0.173	86.67	83-119

Data File: /var/chem/hplc2.i/2141025.b/a2063.d
Report Date: 27-Oct-2014 12:50

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: hplc2.i
Lab File ID: a2063.d
Analysis Type: WATER
Lab Sample ID: 1400
Method: /var/chem/hplc2.i/2141025.b/lc8-8330B.m

Injection Date: 27-OCT-2014 00:36
Init. Cal. Date(s): 24-OCT-2014 24-OCT-2014
Init. Cal. Times: 19:56 23:04
Quant Type: ESTD

COMPOUND	RRF / AMOUNT	RF200	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 HMX	384	359	0.010	6.66821	15.00000	Averaged
2 RDX	354	363	0.010	-2.50253	15.00000	Averaged
3 1,3,5-TNB	635	658	0.010	-3.65705	15.00000	Averaged
$ 4 1,2-Dinitrobenzene	416	415	0.010	0.15231	15.00000	Averaged
5 1,3-DNB	372	357	0.010	3.90236	15.00000	Averaged
6 Nitrobenzene	346	296	0.010	14.43483	15.00000	Averaged
7 Tetryl	460	437	0.010	5.02556	15.00000	Averaged
8 2,4,6-TNT	505	443	0.010	12.40539	15.00000	Averaged
9 3,5-Dinitroaniline	560	536	0.010	4.24692	15.00000	Averaged
10 Nitroglycerin	150	140	0.010	6.27526	15.00000	Averaged
11 2,4-DNT	315	348	0.010	-10.21479	15.00000	Averaged
12 2,6-DNT	407	417	0.010	-2.50323	15.00000	Averaged
13 4-Am-26DNT	428	444	0.010	-3.59688	15.00000	Averaged
14 2-Am-46DNT	418	427	0.010	-1.98235	15.00000	Averaged
15 2-NT	391	358	0.010	8.47256	15.00000	Averaged
16 4-NT	297	308	0.010	-3.62713	15.00000	Averaged
17 3-NT	458	464	0.010	-1.28513	15.00000	Averaged
18 PETN	167	191	0.010	-13.95380	15.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 5.82813
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

Data File: /var/chem/hplc2.i/2141025.b/a2073.d
Report Date: 27-Oct-2014 12:52

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: hplc2.i
Lab File ID: a2073.d
Analysis Type: WATER
Lab Sample ID: 1400
Method: /var/chem/hplc2.i/2141025.b/lc8-8330B.m

Injection Date: 27-OCT-2014 06:54
Init. Cal. Date(s): 24-OCT-2014 24-OCT-2014
Init. Cal. Times: 19:56 23:04
Quant Type: ESTD

COMPOUND	RRF / AMOUNT	RF200	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 HMX	384	402	0.010	-4.52661	15.00000	Averaged
2 RDX	354	318	0.010	10.21489	15.00000	Averaged
3 1,3,5-TNB	635	590	0.010	6.96294	15.00000	Averaged
$ 4 1,2-Dinitrobenzene	416	399	0.010	4.12199	15.00000	Averaged
5 1,3-DNB	372	397	0.010	-6.76230	15.00000	Averaged
6 Nitrobenzene	346	363	0.010	-4.90107	15.00000	Averaged
7 Tetryl	460	443	0.010	3.55304	15.00000	Averaged
8 2,4,6-TNT	505	457	0.010	9.57529	15.00000	Averaged
9 3,5-Dinitroaniline	560	595	0.010	-6.30198	15.00000	Averaged
10 Nitroglycerin	150	135	0.010	9.90332	15.00000	Averaged
11 2,4-DNT	315	360	0.010	-14.16173	15.00000	Averaged
12 2,6-DNT	407	446	0.010	-9.64747	15.00000	Averaged
13 4-Am-26DNT	428	483	0.010	-12.81740	15.00000	Averaged
14 2-Am-46DNT	418	392	0.010	6.19158	15.00000	Averaged
15 2-NT	391	357	0.010	8.73595	15.00000	Averaged
16 4-NT	297	310	0.010	-4.48962	15.00000	Averaged
17 3-NT	458	405	0.010	11.57103	15.00000	Averaged
18 PETN	167	173	0.010	-3.55473	15.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 7.66627
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

Data File: /var/chem/hplc2.i/2141030.b/a2002.d
Report Date: 30-Oct-2014 13:29

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: hplc2.i
Lab File ID: a2002.d
Analysis Type: WATER
Lab Sample ID: 1400
Method: /var/chem/hplc2.i/2141030.b/lc8-8330B.m

Injection Date: 30-OCT-2014 12:14
Init. Cal. Date(s): 24-OCT-2014 24-OCT-2014
Init. Cal. Times: 19:56 23:04
Quant Type: ESTD

COMPOUND	RRF / AMOUNT	RF200	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 HMX	384	373	0.010	2.97565	15.00000	Averaged
2 RDX	354	341	0.010	3.69607	15.00000	Averaged
3 1,3,5-TNB	635	591	0.010	6.77934	15.00000	Averaged
$ 4 1,2-Dinitrobenzene	416	414	0.010	0.51166	15.00000	Averaged
5 1,3-DNB	372	371	0.010	0.20573	15.00000	Averaged
6 Nitrobenzene	346	375	0.010	-8.29084	15.00000	Averaged
7 Tetryl	460	504	0.010	-9.55829	15.00000	Averaged
8 2,4,6-TNT	505	479	0.010	5.15103	15.00000	Averaged
9 3,5-Dinitroaniline	560	504	0.010	9.96269	15.00000	Averaged
10 Nitroglycerin	150	153	0.010	-2.29042	15.00000	Averaged
11 2,4-DNT	315	321	0.010	-1.72306	15.00000	Averaged
12 2,6-DNT	407	423	0.010	-4.02922	15.00000	Averaged
13 4-Am-26DNT	428	429	0.010	-0.24269	15.00000	Averaged
14 2-Am-46DNT	418	430	0.010	-2.80345	15.00000	Averaged
15 2-NT	391	432	0.010	-10.42390	15.00000	Averaged
16 4-NT	297	315	0.010	-6.18934	15.00000	Averaged
17 3-NT	458	498	0.010	-8.88851	15.00000	Averaged
18 PETN	167	166	0.010	0.61745	15.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 4.68552
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

Data File: /var/chem/hplc2.i/2141030.b/a2014.d
Report Date: 03-Nov-2014 11:56

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: hplc2.i
Lab File ID: a2014.d
Analysis Type: WATER
Lab Sample ID: 1400
Method: /var/chem/hplc2.i/2141030.b/lc8-8330B.m

Injection Date: 30-OCT-2014 22:29
Init. Cal. Date(s): 24-OCT-2014 24-OCT-2014
Init. Cal. Times: 19:56 23:04
Quant Type: ESTD

COMPOUND	RRF / AMOUNT	RF200	MIN RRF	MIN %D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
1 HMX	384	362	0.010	5.64387	15.00000	Averaged	
2 RDX	354	335	0.010	5.55254	15.00000	Averaged	
3 1,3,5-TNB	635	571	0.010	10.07873	15.00000	Averaged	
$ 4 1,2-Dinitrobenzene	416	382	0.010	8.18421	15.00000	Averaged	
5 1,3-DNB	372	342	0.010	8.06057	15.00000	Averaged	
6 Nitrobenzene	346	312	0.010	9.98159	15.00000	Averaged	
7 Tetryl	460	407	0.010	11.38873	15.00000	Averaged	
8 2,4,6-TNT	505	438	0.010	13.31577	15.00000	Averaged	
9 3,5-Dinitroaniline	560	492	0.010	12.09248	15.00000	Averaged	
10 Nitroglycerin	150	158	0.010	-5.62115	15.00000	Averaged	
11 2,4-DNT	315	327	0.010	-3.72746	15.00000	Averaged	
12 2,6-DNT	407	368	0.010	9.46614	15.00000	Averaged	
13 4-Am-26DNT	428	426	0.010	0.51878	15.00000	Averaged	
14 2-Am-46DNT	418	405	0.010	3.22153	15.00000	Averaged	
15 2-NT	391	451	0.010	-15.26852	15.00000	Averaged	<-
16 4-NT	297	319	0.010	-7.59594	15.00000	Averaged	
17 3-NT	458	487	0.010	-6.31618	15.00000	Averaged	
18 PETN	167	157	0.010	6.05591	15.00000	Averaged	

Average %D / Drift Results.

Calculated Average %D/Drift = 7.89389
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

Data File: /var/chem/hplc2.i/2141105.b/a2007.d
Report Date: 11-Nov-2014 11:10

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: hplc2.i
Lab File ID: a2007.d
Analysis Type: WATER
Lab Sample ID: 1400
Method: /var/chem/hplc2.i/2141105.b/lc8-8330B.m

Injection Date: 05-NOV-2014 12:51
Init. Cal. Date(s): 24-OCT-2014 24-OCT-2014
Init. Cal. Times: 19:56 23:04
Quant Type: ESTD

COMPOUND	RRF / AMOUNT	RF200	MIN RRF	MIN %D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 HMX	384	375	0.010	2.47064	15.00000	Averaged
2 RDX	354	339	0.010	4.29279	15.00000	Averaged
3 1,3,5-TNB	635	573	0.010	9.64375	15.00000	Averaged
$ 4 1,2-Dinitrobenzene	416	397	0.010	4.52100	15.00000	Averaged
5 1,3-DNB	372	339	0.010	8.65267	15.00000	Averaged
6 Nitrobenzene	346	341	0.010	1.51004	15.00000	Averaged
7 Tetryl	460	508	0.010	-10.60232	15.00000	Averaged
8 2,4,6-TNT	505	484	0.010	4.14466	15.00000	Averaged
9 3,5-Dinitroaniline	560	518	0.010	7.49253	15.00000	Averaged
10 Nitroglycerin	150	164	0.010	-9.52314	15.00000	Averaged
11 2,4-DNT	315	320	0.010	-1.36151	15.00000	Averaged
12 2,6-DNT	407	411	0.010	-1.01782	15.00000	Averaged
13 4-Am-26DNT	428	416	0.010	2.85106	15.00000	Averaged
14 2-Am-46DNT	418	439	0.010	-4.99304	15.00000	Averaged
15 2-NT	391	398	0.010	-1.71279	15.00000	Averaged
16 4-NT	297	314	0.010	-5.62838	15.00000	Averaged
17 3-NT	458	492	0.010	-7.45325	15.00000	Averaged
18 PETN	167	147	0.010	12.45901	15.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 5.57391
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

Data File: /var/chem/hplc2.i/2141105.b/a2016.d
Report Date: 11-Nov-2014 13:45

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: hplc2.i
Lab File ID: a2016.d
Analysis Type: WATER
Lab Sample ID: 1400
Method: /var/chem/hplc2.i/2141105.b/lc8-8330B.m

Injection Date: 05-NOV-2014 18:31
Init. Cal. Date(s): 24-OCT-2014 24-OCT-2014
Init. Cal. Times: 19:56 23:04
Quant Type: ESTD

COMPOUND	RRF / AMOUNT	RF200	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 HMX	384	397	0.010	-3.31484	15.00000	Averaged
2 RDX	354	337	0.010	4.79500	15.00000	Averaged
3 1,3,5-TNB	635	620	0.010	2.33260	15.00000	Averaged
$ 4 1,2-Dinitrobenzene	416	439	0.010	-5.56965	15.00000	Averaged
5 1,3-DNB	372	398	0.010	-7.12833	15.00000	Averaged
6 Nitrobenzene	346	319	0.010	7.92836	15.00000	Averaged
7 Tetryl	460	458	0.010	0.42529	15.00000	Averaged
8 2,4,6-TNT	505	465	0.010	7.96431	15.00000	Averaged
9 3,5-Dinitroaniline	560	543	0.010	2.93456	15.00000	Averaged
10 Nitroglycerin	150	166	0.010	-10.94964	15.00000	Averaged
11 2,4-DNT	315	350	0.010	-10.95216	15.00000	Averaged
12 2,6-DNT	407	432	0.010	-6.24012	15.00000	Averaged
13 4-Am-26DNT	428	410	0.010	4.17195	15.00000	Averaged
14 2-Am-46DNT	418	417	0.010	0.26820	15.00000	Averaged
15 2-NT	391	383	0.010	2.01434	15.00000	Averaged
16 4-NT	297	290	0.010	2.37663	15.00000	Averaged
17 3-NT	458	475	0.010	-3.86182	15.00000	Averaged
18 PETN	167	177	0.010	-5.48402	15.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 4.92843
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 16-OCT-2014 21:52
End Cal Date : 17-OCT-2014 03:01
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /var/chem/hplc2.i/2141111.b/lccn-8330B.m
Cal Date : 14-Nov-2014 12:45 dlb
Curve Type : Average

Calibration File Names:
Level 2: /var/chem/hplc2.i/2141016.b/a2009.d
Level 3: /var/chem/hplc2.i/2141016.b/a2008.d
Level 4: /var/chem/hplc2.i/2141016.b/a2007.d
Level 5: /var/chem/hplc2.i/2141016.b/a2006.d
Level 6: /var/chem/hplc2.i/2141016.b/a2005.d
Level 7: /var/chem/hplc2.i/2141016.b/a2004.d

Compound	50.000 Level 2	100.000 Level 3	200.000 Level 4	500.000 Level 5	750.000 Level 6	1000.000 Level 7	RRF	% RSD
1 HMX	384	361	375	380	378	382	376	2.198
2 RDX	334	320	319	323	321	321	323	1.757
4 Nitroglycerin	73.28000	78.44000	82.21000	91.69600	98.65600	92.30500	86.09783	11.208
5 3,5-DNA	689	695	663	666	684	671	678	1.945
6 Nitrobenzene	216	280	297	301	297	305	283	12.003
7 4-Am-DNT	440	488	498	511	506	517	493	5.701
8 2-Am-DNT	489	484	468	483	490	486	483	1.667
9 1,3-DNB	403	492	406	417	416	411	424	7.983
10 2-NT	232	289	251	243	241	243	250	8.051
11 4-NT	303	325	370	437	428	397	377	14.468
13 3-NT/PETN	137	186	202	165	153	176	170	13.635
14 2,6-DNT	315	313	327	337	321	328	324	2.731
15 1,3,5-TNB	593	764	707	716	708	710	699	8.084
16 2,4-DNT	220	371	321	367	353	341	329	17.192
17 Tetryl	367	490	432	510	480	482	460	11.352
18 2,4,6-TNT	360	315	473	493	500	491	439	18.306
$ 3 1,2-Dinitrobenzene	322	377	410	418	405	410	390	9.347

Data File: /var/chem/hplc2.i/2141016.b/a2010.d
Report Date: 19-Nov-2014 10:33

GCAL, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: 1600
Level: LOW
Data Type: LC DATA
SpikeList File: icv.spk
Sublist File: all.sub
Method File: /var/chem/hplc2.i/2141016.b/lccn-8330B.m
Misc Info:

Client SDG: 2141016
Fraction: OTHER

Operator: dlb
SampleType: LCS
Quant Type: ESTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
1 HMX	0.200	0.201	100.60	85-115
4 Nitroglycerin	0.200	0.178	88.78	85-115
2 RDX	0.200	0.218	108.75	85-115
15 1,3,5-TNB	0.200	0.192	95.98	85-115
9 1,3-DNB	0.200	0.205	102.56	85-115
6 Nitrobenzene	0.200	0.199	99.43	85-115
17 Tetryl	0.200	0.200	99.88	85-115
18 2,4,6-TNT	0.200	0.190	94.89	85-115
7 4-Am-DNT	0.200	0.203	101.69	85-115
8 2-Am-DNT	0.200	0.198	98.85	85-115
14 2,6-DNT	0.200	0.203	101.54	85-115
16 2,4-DNT	0.200	0.211	105.59	85-115
10 2-NT	0.200	0.214	107.05	85-115
11 4-NT	0.200	0.176	88.02	85-115
13 3-NT/PETN	0.400	0.400	100.08	85-115

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 3 1,2-Dinitrobenzene	0.200	0.179	89.37	60-140

Data File: /var/chem/hplc2.i/2141110.b/a2005.d
Report Date: 11-Nov-2014 11:36

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: hplc2.i
Lab File ID: a2005.d
Analysis Type: WATER
Lab Sample ID: 1400
Method: /var/chem/hplc2.i/2141110.b/lccn-8330B.m

Injection Date: 10-NOV-2014 17:29
Init. Cal. Date(s): 16-OCT-2014 17-OCT-2014
Init. Cal. Times: 21:52 03:01
Quant Type: ESTD

COMPOUND	RRF / AMOUNT	RF200	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
1 HMX	376	382	0.010	-1.49789	15.00000	Averaged	
2 RDX	323	347	0.010	-7.36398	15.00000	Averaged	
4 Nitroglycerin	86.09783	81.46000	0.010	5.38670	15.00000	Averaged	
5 3,5-DNA	678	697	0.010	-2.73442	15.00000	Averaged	
6 Nitrobenzene	283	258	0.010	8.83635	15.00000	Averaged	
$ 3 1,2-Dinitrobenzene	390	420	0.010	-7.52905	15.00000	Averaged	
7 4-Am-DNT	493	537	0.010	-8.78545	15.00000	Averaged	
8 2-Am-DNT	483	535	0.010	-10.68265	15.00000	Averaged	
9 1,3-DNB	424	408	0.010	3.78007	15.00000	Averaged	
10 2-NT	250	171	0.010	31.54735	15.00000	Averaged	<-
11 4-NT	377	328	0.010	12.88197	15.00000	Averaged	
13 3-NT/PETN	170	233	0.010	-37.00964	15.00000	Averaged	<-
14 2,6-DNT	324	323	0.010	0.03491	15.00000	Averaged	
15 1,3,5-TNB	699	703	0.010	-0.58123	15.00000	Averaged	
16 2,4-DNT	329	298	0.010	9.44496	15.00000	Averaged	
17 Tetryl	460	268	0.010	41.78455	15.00000	Averaged	<-
18 2,4,6-TNT	439	479	0.010	-9.15466	15.00000	Averaged	

Average %D / Drift Results.

Calculated Average %D/Drift = 11.70799
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

Data File: /var/chem/hplc2.i/2141110.b/a2012.d
Report Date: 11-Nov-2014 11:45

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: hplc2.i
Lab File ID: a2012.d
Analysis Type: WATER
Lab Sample ID: 1400
Method: /var/chem/hplc2.i/2141110.b/lccn-8330B.m

Injection Date: 11-NOV-2014 00:42
Init. Cal. Date(s): 16-OCT-2014 17-OCT-2014
Init. Cal. Times: 21:52 03:01
Quant Type: ESTD

COMPOUND	RRF / AMOUNT	RF200	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
1 HMX	376	397	0.010	-5.43210	15.00000	Averaged	
2 RDX	323	330	0.010	-2.29852	15.00000	Averaged	
4 Nitroglycerin	86.09783	91.23000	0.010	-5.96085	15.00000	Averaged	
5 3,5-DNA	678	696	0.010	-2.63930	15.00000	Averaged	
6 Nitrobenzene	283	255	0.010	9.93467	15.00000	Averaged	
$ 3 1,2-Dinitrobenzene	390	418	0.010	-7.00502	15.00000	Averaged	
7 4-Am-DNT	493	557	0.010	-12.98783	15.00000	Averaged	
8 2-Am-DNT	483	504	0.010	-4.34752	15.00000	Averaged	
9 1,3-DNB	424	418	0.010	1.56392	15.00000	Averaged	
10 2-NT	250	161	0.010	35.52462	15.00000	Averaged	<-
11 4-NT	377	319	0.010	15.20439	15.00000	Averaged	<-
13 3-NT/PETN	170	213	0.010	-25.34827	15.00000	Averaged	<-
14 2,6-DNT	324	343	0.010	-6.15138	15.00000	Averaged	
15 1,3,5-TNB	699	761	0.010	-8.73716	15.00000	Averaged	
16 2,4-DNT	329	315	0.010	4.07524	15.00000	Averaged	
17 Tetryl	460	435	0.010	5.59651	15.00000	Averaged	
18 2,4,6-TNT	439	367	0.010	16.29151	15.00000	Averaged	<-

Average %D / Drift Results.

Calculated Average %D/Drift = 9.94699
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

Data File: /var/chem/hplc2.i/2141110.b/a2019.d
Report Date: 11-Nov-2014 11:51

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: hplc2.i
Lab File ID: a2019.d
Analysis Type: WATER
Lab Sample ID: 1400
Method: /var/chem/hplc2.i/2141110.b/lccn-8330B.m

Injection Date: 11-NOV-2014 07:55
Init. Cal. Date(s): 16-OCT-2014 17-OCT-2014
Init. Cal. Times: 21:52 03:01
Quant Type: ESTD

COMPOUND	RRF / AMOUNT	RF200	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
1 HMX	376	396	0.010	-5.28068	15.00000	Averaged	
2 RDX	323	325	0.010	-0.73646	15.00000	Averaged	
4 Nitroglycerin	86.09783	80.12000	0.010	6.94307	15.00000	Averaged	
5 3,5-DNA	678	690	0.010	-1.77002	15.00000	Averaged	
6 Nitrobenzene	283	245	0.010	13.38348	15.00000	Averaged	
$ 3 1,2-Dinitrobenzene	390	418	0.010	-7.23052	15.00000	Averaged	
7 4-Am-DNT	493	514	0.010	-4.27089	15.00000	Averaged	
8 2-Am-DNT	483	533	0.010	-10.30713	15.00000	Averaged	
9 1,3-DNB	424	456	0.010	-7.41032	15.00000	Averaged	
10 2-NT	250	162	0.010	35.00193	15.00000	Averaged	<NT
11 4-NT	377	610	0.010	-62.05431	15.00000	Averaged	<NT
13 3-NT/PETN	170	176	0.010	-3.79603	15.00000	Averaged	
14 2,6-DNT	324	352	0.010	-8.90222	15.00000	Averaged	
15 1,3,5-TNB	699	726	0.010	-3.73022	15.00000	Averaged	
16 2,4-DNT	329	313	0.010	4.65328	15.00000	Averaged	
17 Tetryl	460	620	0.010	-34.80627	15.00000	Averaged	<NT
18 2,4,6-TNT	439	420	0.010	4.21641	15.00000	Averaged	

Confirmation only

Average %D / Drift Results.

Calculated Average %D/Drift = 12.61725
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

Data File: /var/chem/hplc2.i/2141111.b/a2002.d
Report Date: 13-Nov-2014 09:24

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: hplc2.i
Lab File ID: a2002.d
Analysis Type: WATER
Lab Sample ID: 1400
Method: /var/chem/hplc2.i/2141111.b/lccn-8330B.m

Injection Date: 11-NOV-2014 15:57
Init. Cal. Date(s): 16-OCT-2014 17-OCT-2014
Init. Cal. Times: 21:52 03:01
Quant Type: ESTD

COMPOUND	RRF / AMOUNT	RF200	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 HMX	376	358	0.010	4.78596	15.00000	Averaged
2 RDX	323	331	0.010	-2.46107	15.00000	Averaged
4 Nitroglycerin	86.09783	73.75000	0.010	14.34163	15.00000	Averaged
5 3,5-DNA	678	622	0.010	8.20946	15.00000	Averaged
6 Nitrobenzene	283	292	0.010	-3.34769	15.00000	Averaged
$ 3 1,2-Dinitrobenzene	390	426	0.010	-9.12805	15.00000	Averaged
7 4-Am-DNT	493	449	0.010	8.88866	15.00000	Averaged
8 2-Am-DNT	483	504	0.010	-4.33407	15.00000	Averaged
9 1,3-DNB	424	432	0.010	-1.78389	15.00000	Averaged
10 2-NT	250	261	0.010	-4.68262	15.00000	Averaged
11 4-NT	377	336	0.010	10.86097	15.00000	Averaged
13 3-NT/PETN	170	195	0.010	-14.98752	15.00000	Averaged
14 2,6-DNT	324	285	0.010	11.82178	15.00000	Averaged
15 1,3,5-TNB	699	614	0.010	12.24422	15.00000	Averaged
16 2,4-DNT	329	330	0.010	-0.33310	15.00000	Averaged
17 Tetryl	460	463	0.010	-0.48879	15.00000	Averaged
18 2,4,6-TNT	439	412	0.010	6.11646	15.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 6.98917
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

Data File: /var/chem/hplc2.i/2141111.b/a2010.d
Report Date: 13-Nov-2014 09:25

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: hplc2.i
Lab File ID: a2010.d
Analysis Type: WATER
Lab Sample ID: 1400
Method: /var/chem/hplc2.i/2141111.b/lccn-8330B.m

Injection Date: 12-NOV-2014 00:12
Init. Cal. Date(s): 16-OCT-2014 17-OCT-2014
Init. Cal. Times: 21:52 03:01
Quant Type: ESTD

COMPOUND	RRF / AMOUNT	RF200	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 HMX	376	376	0.010	0.22350	15.00000	Averaged
2 RDX	323	339	0.010	-4.95974	15.00000	Averaged
4 Nitroglycerin	86.09783	89.59500	0.010	-4.06185	15.00000	Averaged
5 3,5-DNA	678	672	0.010	0.88503	15.00000	Averaged
6 Nitrobenzene	283	301	0.010	-6.30659	15.00000	Averaged
$ 3 1,2-Dinitrobenzene	390	445	0.010	-14.15440	15.00000	Averaged
7 4-Am-DNT	493	495	0.010	-0.40705	15.00000	Averaged
8 2-Am-DNT	483	500	0.010	-3.36270	15.00000	Averaged
9 1,3-DNB	424	453	0.010	-6.77023	15.00000	Averaged
10 2-NT	250	277	0.010	-10.85480	15.00000	Averaged
11 4-NT	377	357	0.010	5.28663	15.00000	Averaged
13 3-NT/PETN	170	178	0.010	-5.06277	15.00000	Averaged
14 2,6-DNT	324	326	0.010	-0.82898	15.00000	Averaged
15 1,3,5-TNB	699	683	0.010	2.41478	15.00000	Averaged
16 2,4-DNT	329	335	0.010	-1.87556	15.00000	Averaged
17 Tetryl	460	465	0.010	-0.95371	15.00000	Averaged
18 2,4,6-TNT	439	405	0.010	7.67116	15.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 4.47526
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

8330 SAMPLE PREPARATION FORM

EXTRACTION DATE/TIME: 430	Start: 10/23/14	End: 835	BATCH NO: 543548
MATRIX:	WATER ☑ SOIL ☐ OTHER ☐		LEVEL: LOW ☑ MEDIUM ☐

	CLIENT	CLIENT ID	GCAL ID	INITIAL VOL/WT mL g	FINAL VOLUME (mL)	Init pH	SAMPLE TYPE	COMMENT	METHOD
1	QC ACCOUNT	MB for HBN 543548 [EXTO/40724]	1372721	1000	20.0		MB		WATER BATCH SONICATION
2	QC ACCOUNT	LCS for HBN 543548 [EXTO/40724	1372722	1000	20.0		LCS		
3	QC ACCOUNT	LCSD for HBN 543548 [EXTO/4072	1372723	1000	20.0		LCSD		SEA SAND
4	4747	MA01MW002	21410220501	1000	20.0		SAMPLE		
5	4747	MA01MW001	21410220503	1000	20.0		SAMPLE		ACETONITILE LOT# 131500
6	4747	MA01MW004	21410220504	1000	20.0		SAMPLE		
7	4747	MA01MW004-a	21410220505	1000	20.0		FLDDUP		CALCIUM CHLORIDE LOT#
8	4747	MA01MW003	21410220507	1000	20.0		SAMPLE		
9									FLORISIL CLEANUP/3620
10									
11									HPLC Water 146963
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									

COMMENTS: SAMPLE PREPARATION INCLUDE DETERMINATION OF SAMPLE VOLUME/WEIGHT, SOLVENT EXTRACTION AND EVAPORATION OF SOLVENT TO FINAL VOLUME

BALANCE ID: _____ TEMP: _____

						TECHNICIAN	DATE
8330 ID	583-16-15	8330 SPIKE ID	583-23-2			BDT	10-23-14
VOLUME	1.0 ml		1.0 ml				
CONCENTRATION	50 ug/ml		4 ug/ml			SUPERVISOR	DATE
ACID						TBS	10/24/14
SPIKE WITNESS	NA						

evision 3, 10/04/2010

8330 SAMPLE PREPARATION FORM

EXTRACTION DATE/TIME: 430	Start: 10/25/14	End: 6:30	BATCH NO: 543732
MATRIX:	WATER ☑ SOIL ☐ OTHER ☐		LEVEL:	LOW ☑ MEDIUM ☐

	CLIENT	CLIENT ID	GCAL ID	INITIAL VOL/WT mL g	FINAL VOLUME (mL)	Init pH	SAMPLE TYPE	COMMENT	METHOD
1	QC ACCOUNT	MB for HBN 543732 [EXTO/40757]	1373819	1000	2.0		MB		WATER BATCH SONICATION
2	QC ACCOUNT	LCS for HBN 543732 [EXTO/40757	1373820	1000	2.0		LCS		
3	QC ACCOUNT	LCSD for HBN 543732 [EXTO/4075	1373821	1000	2.0		LCSD		SEA SAND
4	4747	M114MW002	21410220509	1000	2.0		SAMPLE		
5	4747	M114MW003	21410220511	1000	2.0		SAMPLE		ACETONITILE LOT# 1315-00
6	4747	M114MW004	21410220512	1000	2.0		SAMPLE		
7	4747	M114MW001	21410220514	1000	2.0		SAMPLE		CALCIUM CHLORIDE LOT#
8	4747	MWQ-24	21410220515	1000	2.0		SAMPLE		
9	4747	MWQ-24-ms	21410220516	1000	2.0		MS		FLORISIL CLEANUP/3620
10	4747	MWQ-24-sd	21410220517	1000	2.0		MSD		
11	4747	MA02MW001D	21410220520	1000	2.0		SAMPLE		
12									
13									HPLC Wo 146963
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									

COMMENTS: SAMPLE PREPARATION INCLUDE DETERMINATION OF SAMPLE VOLUME/WEIGHT, SOLVENT EXTRACTION AND EVAPORATION OF SOLVENT TO FINAL VOLUME

BALANCE ID: _____ TEMP: _____

8330 ID	583-16-15	8330 SPIKE ID	583-23-2			TECHNICIAN	DATE
VOLUME	1.0 ml		1.0 ml			BDF	10-25-14
CONCENTRATION	50 ug/ml		4 ug/ml				
ACID						SUPERVISOR	DATE
SPIKE WITNESS	NA					TES	10/27/14

Revision 3, 10/04/2010

LABORATORY CHRONICLE: HPLC DEPARTMENT

Date: 24-OCT-2014
Instrument: hplc2.i

Standard	Conc ppm	Lot No.
DFTPP	50	
Int. Standard	4000	

Inst. Conditions: _____

MISC: _____

Sample ID	ClientName	DataFile	Wgt/Vol	Injection Time	Dil	Anal	ALS	Comments
solvblk	1	a2001.d	1000.00 ml	24-OCT-2014 18:40	1.000	dlb	1	all
1400	53-51-16	a2002.d	1000.00 ml	24-OCT-2014 19:18	1.000	dlb	1	all
1207	53-53-11	a2003.d	1000.00 ml	24-OCT-2014 19:56	1.000	dlb	1	all
1206	53-53-11	a2004.d	1000.00 ml	24-OCT-2014 20:34	1.000	dlb	1	all
1205	53-53-11	a2005.d	1000.00 ml	24-OCT-2014 21:11	1.000	dlb	1	all
1204	53-53-11	a2006.d	1000.00 ml	24-OCT-2014 21:49	1.000	dlb	1	all
1203	53-53-11	a2007.d	1000.00 ml	24-OCT-2014 22:27	1.000	dlb	1	all
1202	53-53-11	a2008.d	1000.00 ml	24-OCT-2014 23:04	1.000	dlb	1	all
1600	53-53-12	a2009.d	1.00 ml	24-OCT-2014 23:42	1.000	dlb	1	all
solvblk	1	a2010.d	1000.00 ml	25-OCT-2014 00:20	1.000	dlb	1	all

LABORATORY CHRONICLE: HPLC DEPARTMENT

Date: 25-OCT-2014
Instrument: hplc2.i

Standard	Conc ppm	Lot No.
DFTPP	50	
Int. Standard	4000	

Inst. Conditions: _____

MISC: _____

Sample ID	ClientName	DataFile	Wgt/Vol	Injection Time	Dil	Anal	ALS	Comments
21410161702	4799	a2037.d	1000.00 ml	26-OCT-2014 08:12	2.000	dlb	1	all
21410161703	4799	a2038.d	1000.00 ml	26-OCT-2014 08:50	1.000	dlb	1	all
21410161704	ms	a2039.d	1000.00 ml	26-OCT-2014 09:27	1.000	dlb	1	all
21410161705	msd	a2040.d	1000.00 ml	26-OCT-2014 10:05	1.000	dlb	1	all
1400	53-53-12	a2041.d	1000.00 ml	26-OCT-2014 10:43	1.000	dlb	1	all
21410161706	4799	a2042.d	1000.00 ml	26-OCT-2014 11:21	1.000	dlb	1	all
21410161707	4799	a2043.d	1000.00 ml	26-OCT-2014 11:59	1.000	dlb	1	all
21410161708	4799	a2044.d	1000.00 ml	26-OCT-2014 12:37	1.000	dlb	1	all
21410161709	4799	a2045.d	1000.00 ml	26-OCT-2014 13:14	1.000	dlb	1	all
21410161710	4799	a2046.d	1000.00 ml	26-OCT-2014 13:52	1.000	dlb	1	all
21410161711	4799	a2047.d	1000.00 ml	26-OCT-2014 14:30	1.000	dlb	1	all
21410171301	4799	a2048.d	1000.00 ml	26-OCT-2014 15:08	1.000	dlb	1	all
21410171302	4799	a2049.d	1000.00 ml	26-OCT-2014 15:46	1.000	dlb	1	all
21410171303	4799	a2050.d	1000.00 ml	26-OCT-2014 16:24	1.000	dlb	1	all
21410171304	4799	a2051.d	1000.00 ml	26-OCT-2014 17:02	1.000	dlb	1	all
1400	53-53-12	a2052.d	1000.00 ml	26-OCT-2014 17:39	1.000	dlb	1	all
21410171305	4799	a2053.d	1000.00 ml	26-OCT-2014 18:17	1.000	dlb	1	all
21410171306	4799	a2054.d	1000.00 ml	26-OCT-2014 18:55	1.000	dlb	1	all
21410171307	4799	a2055.d	1000.00 ml	26-OCT-2014 19:33	1.000	dlb	1	all
1371565	mb	a2056.d	1000.00 ml	26-OCT-2014 20:11	1.000	dlb	1	250267D
1371566	lcs	a2057.d	1000.00 ml	26-OCT-2014 20:49	1.000	dlb	1	250267D
1371567	lcsd	a2058.d	1000.00 ml	26-OCT-2014 21:26	1.000	dlb	1	250267D
21410171308	4799	a2059.d	1000.00 ml	26-OCT-2014 22:04	1.000	dlb	1	250267D
21410171309	4799	a2060.d	1000.00 ml	26-OCT-2014 22:42	1.000	dlb	1	250267D
21410171310	4799	a2061.d	1000.00 ml	26-OCT-2014 23:20	1.000	dlb	1	250267D
21410171311	4799	a2062.d	1000.00 ml	26-OCT-2014 23:58	1.000	dlb	1	250267D
1400	53-53-12	a2063.d	1000.00 ml	27-OCT-2014 00:36	1.000	dlb	1	all
21410171312	4799	a2064.d	1000.00 ml	27-OCT-2014 01:13	1.000	dlb	1	250267D
1372721	mb	a2065.d	1000.00 ml	27-OCT-2014 01:51	1.000	dlb	1	all
1372722	lcs	a2066.d	1000.00 ml	27-OCT-2014 02:29	1.000	dlb	1	all
1372723	lcsd	a2067.d	1000.00 ml	27-OCT-2014 03:07	1.000	dlb	1	all
21410220501	4747	a2068.d	1000.00 ml	27-OCT-2014 03:45	1.000	dlb	1	all
21410220503	4747	a2069.d	1000.00 ml	27-OCT-2014 04:23	1.000	dlb	1	all
21410220504	4747	a2070.d	1000.00 ml	27-OCT-2014 05:01	1.000	dlb	1	all
21410220505	4747	a2071.d	1000.00 ml	27-OCT-2014 05:39	1.000	dlb	1	all
21410220507	4747	a2072.d	1000.00 ml	27-OCT-2014 06:16	1.000	dlb	1	all

LABORATORY CHRONICLE: HPLC DEPARTMENT

Date: 25-OCT-2014
Instrument: hplc2.i

Standard	Conc ppm	Lot No.
DFTPP	50	
Int. Standard	4000	

Inst. Conditions: _____

MISC: _____

Sample ID	ClientName	DataFile	Wgt/Vol	Injection Time	Dil	Anal	ALS	Comments
1400	53-53-12	a2073.d	1000.00 ml	27-OCT-2014 06:54	1.000	dlb	1	all

LABORATORY CHRONICLE: HPLC DEPARTMENT

Date: 30-OCT-2014
Instrument: hplc2.i

Standard	Conc ppm	Lot No.
DFTPP	50	
Int. Standard	4000	

Inst. Conditions: _____

MISC: _____

Sample ID	ClientName	DataFile	Wgt/Vol	Injection Time	Dil	Anal	ALS	Comments
solvblk	1	a2001.d	1000.00 ml	30-OCT-2014 11:37	1.000	dlb	1	all
1400	53-57-9	a2002.d	1000.00 ml	30-OCT-2014 12:14	1.000	dlb	1	all
1373819	mb	a2003.d	1000.00 ml	30-OCT-2014 15:33	1.000	dlb	1	all
1373820	lcs	a2004.d	1000.00 ml	30-OCT-2014 16:11	1.000	dlb	1	all
1373821	lcsd	a2005.d	1000.00 ml	30-OCT-2014 16:49	1.000	dlb	1	all
21410220509	4747	a2006.d	1000.00 ml	30-OCT-2014 17:26	1.000	dlb	1	all
21410220511	4747	a2007.d	1000.00 ml	30-OCT-2014 18:04	1.000	dlb	1	all
21410220512	4747	a2008.d	1000.00 ml	30-OCT-2014 18:42	1.000	dlb	1	all
21410220514	4747	a2009.d	1000.00 ml	30-OCT-2014 19:20	1.000	dlb	1	all
21410220515	4747	a2010.d	1000.00 ml	30-OCT-2014 19:58	1.000	dlb	1	all
21410220516	ms	a2011.d	1000.00 ml	30-OCT-2014 20:36	1.000	dlb	1	all
21410220517	msd	a2012.d	1000.00 ml	30-OCT-2014 21:14	1.000	dlb	1	all
21410220520	4747	a2013.d	1000.00 ml	30-OCT-2014 21:51	1.000	dlb	1	all
1400	53-57-9	a2014.d	1000.00 ml	30-OCT-2014 22:29	1.000	dlb	1	all

LABORATORY CHRONICLE: HPLC DEPARTMENT

Date: 05-NOV-2014
Instrument: hplc2.i

Standard	Conc ppm	Lot No.
DFTPP	50	
Int. Standard	4000	

Inst. Conditions: _____

MISC: _____

Sample ID	ClientName	DataFile	Wgt/Vol	Injection Time	Dil	Anal	ALS	Comments
solvblk	1	a2001.d	1000.00 ml	05-NOV-2014 09:04	1.000	dlb	1	all
1400	53-58-13	a2002.d	1000.00 ml	05-NOV-2014 09:42	1.000	dlb	1	all
1400	53-58-13	a2004.d	1000.00 ml	05-NOV-2014 10:57	1.000	dlb	1	all
1371566	lcsd	a2005.d	1000.00 ml	05-NOV-2014 11:35	1.000	dlb	1	all
1371567	lcsd	a2006.d	1000.00 ml	05-NOV-2014 12:13	1.000	dlb	1	all
1400	53-58-13	a2007.d	1000.00 ml	05-NOV-2014 12:51	1.000	dlb	1	all
21410220512	4747	a2008.d	1000.00 ml	05-NOV-2014 13:29	1.000	dlb	1	all
21410220514	4747	a2009.d	1000.00 ml	05-NOV-2014 14:06	1.000	dlb	1	all
21410220511	20	a2010.d	1000.00 ml	05-NOV-2014 14:44	20.000	dlb	1	all
21410220511	5	a2011.d	1000.00 ml	05-NOV-2014 15:22	50.000	dlb	1	all
solvblk	1	a2012.d	1000.00 ml	05-NOV-2014 16:00	1.000	dlb	1	all
21410220515	20	a2013.d	1000.00 ml	05-NOV-2014 16:37	20.000	dlb	1	all
21410220515	5	a2014.d	1000.00 ml	05-NOV-2014 17:15	50.000	dlb	1	all
solvblk	1	a2015.d	1000.00 ml	05-NOV-2014 17:53	1.000	dlb	1	all
1400	53-58-13	a2016.d	1000.00 ml	05-NOV-2014 18:31	1.000	dlb	1	all

LABORATORY CHRONICLE: HPLC DEPARTMENT

Date: 16-OCT-2014
Instrument: hplc2.i

Standard	Conc ppm	Lot No.
DFTPP	50	
Int. Standard	4000	

Inst. Conditions: _____

MISC: _____

Sample ID	ClientName	DataFile	Wgt/Vol	Injection Time	Dil	Anal	ALS	Comments
solvblk		a2001.d	1000.00 ml	16-OCT-2014 19:31	1.000	dlb	1	all
solvblk		a2002.d	1000.00 ml	16-OCT-2014 19:48	1.000	dlb	1	all
1400		a2003.d	1000.00 ml	16-OCT-2014 20:50	1.000	dlb	1	all
1207		a2004.d	1000.00 ml	16-OCT-2014 21:52	1.000	dlb	1	all
1206		a2005.d	1000.00 ml	16-OCT-2014 22:54	1.000	dlb	1	all
1205		a2006.d	1000.00 ml	16-OCT-2014 23:56	1.000	dlb	1	all
1204		a2007.d	1000.00 ml	17-OCT-2014 00:57	1.000	dlb	1	all
1203		a2008.d	1000.00 ml	17-OCT-2014 01:59	1.000	dlb	1	all
1202		a2009.d	1000.00 ml	17-OCT-2014 03:01	1.000	dlb	1	all
1600		a2010.d	1.00 ml	17-OCT-2014 04:03	1.000	dlb	1	all
1366213		a2011.d	1000.00 ml	17-OCT-2014 05:05	1.000	dlb	1	HMXRDX
1366214		a2012.d	1000.00 ml	17-OCT-2014 06:06	1.000	dlb	1	HMXRDX
1366215		a2013.d	1000.00 ml	17-OCT-2014 07:08	1.000	dlb	1	HMXRDX
21410031301		a2014.d	1000.00 ml	17-OCT-2014 08:10	1.000	dlb	1	HMXRDX
1367348		a2015.d	1000.00 ml	17-OCT-2014 09:12	1.000	dlb	1	HMXRDX
1367349		a2016.d	1000.00 ml	17-OCT-2014 10:14	1.000	dlb	1	HMXRDX
1367350		a2017.d	1000.00 ml	17-OCT-2014 11:16	1.000	dlb	1	HMXRDX
21410077501		a2018.d	1000.00 ml	17-OCT-2014 12:18	1.000	dlb	1	HMXRDX
1400		a2019.d	1000.00 ml	17-OCT-2014 13:20	1.000	dlb	1	HMXRDX
1368335		a2020.d	1000.00 ml	17-OCT-2014 14:22	1.000	dlb	1	HMXRDX
1368336		a2021.d	1000.00 ml	17-OCT-2014 15:24	1.000	dlb	1	HMXRDX
1368337		a2022.d	1000.00 ml	17-OCT-2014 16:25	1.000	dlb	1	HMXRDX
21410085201		a2023.d	1000.00 ml	17-OCT-2014 17:27	1.000	dlb	1	HMXRDX
1400		a2024.d	1000.00 ml	17-OCT-2014 18:29	1.000	dlb	1	all
1362218		a2025.d	1000.00 ml	17-OCT-2014 19:31	1.000	dlb	1	all
1362219		a2026.d	1000.00 ml	17-OCT-2014 20:33	1.000	dlb	1	all
1362220		a2027.d	1000.00 ml	17-OCT-2014 21:35	1.000	dlb	1	all
21409220906		a2028.d	1000.00 ml	17-OCT-2014 22:37	10.000	dlb	1	all
21409220906		a2029.d	1000.00 ml	17-OCT-2014 23:38	1.000	dlb	1	all
blk		a2030.d	1000.00 ml	18-OCT-2014 00:40	1.000	dlb	1	all
21409220906		a2031.d	1000.00 ml	18-OCT-2014 01:42	10.000	dlb	1	all
21409220906		a2032.d	1000.00 ml	18-OCT-2014 02:44	1.000	dlb	1	all
blk		a2033.d	1000.00 ml	18-OCT-2014 03:46	1.000	dlb	1	all
1400		a2034.d	1000.00 ml	18-OCT-2014 04:48	1.000	dlb	1	all
doc1		a2035.d	1000.00 ml	18-OCT-2014 05:50	1.000	dlb	1	all
doc2		a2036.d	1000.00 ml	18-OCT-2014 06:51	1.000	dlb	1	all

LABORATORY CHRONICLE: HPLC DEPARTMENT

Date: 10-NOV-2014
Instrument: hplc2.i

Standard	Conc ppm	Lot No.
DFTPP	50	
Int. Standard	4000	

Inst. Conditions: _____

MISC: _____

Sample ID	ClientName	DataFile	Wgt/Vol	Injection Time	Dil	Anal	ALS	Comments
solvblk		a2001.d	1000.00 ml	10-NOV-2014 13:22	1.000	dlb	1	231734LQC
1400		a2002.d	1000.00 ml	10-NOV-2014 14:23	1.000	dlb	1	all
1400		a2005.d	1000.00 ml	10-NOV-2014 17:29	1.000	dlb	1	all
1373819		a2006.d	1000.00 ml	10-NOV-2014 18:31	1.000	dlb	1	all
1373820		a2007.d	1000.00 ml	10-NOV-2014 19:33	1.000	dlb	1	all
1373821		a2008.d	1000.00 ml	10-NOV-2014 20:35	1.000	dlb	1	all
21410220509		a2009.d	1000.00 ml	10-NOV-2014 21:36	1.000	dlb	1	4747conf
21410220512		a2010.d	1000.00 ml	10-NOV-2014 22:38	1.000	dlb	1	4747conf
21410220514		a2011.d	1000.00 ml	10-NOV-2014 23:40	1.000	dlb	1	4747conf
1400		a2012.d	1000.00 ml	11-NOV-2014 00:42	1.000	dlb	1	all
21410220511		a2013.d	1000.00 ml	11-NOV-2014 01:44	20.000	dlb	1	4747conf
21410220511		a2014.d	1000.00 ml	11-NOV-2014 02:46	50.000	dlb	1	all
solvblk		a2015.d	1000.00 ml	11-NOV-2014 03:48	1.000	dlb	1	all
21410220515		a2016.d	1000.00 ml	11-NOV-2014 04:50	20.000	dlb	1	4747conf
21410220515		a2017.d	1000.00 ml	11-NOV-2014 05:51	50.000	dlb	1	all
solvblk		a2018.d	1000.00 ml	11-NOV-2014 06:53	1.000	dlb	1	all
1400		a2019.d	1000.00 ml	11-NOV-2014 07:55	1.000	dlb	1	all

LABORATORY CHRONICLE: HPLC DEPARTMENT

Date: 11-NOV-2014
Instrument: hplc2.i

Standard	Conc ppm	Lot No.
DFTPP	50	
Int. Standard	4000	

Inst. Conditions: _____

MISC: _____

Sample ID	ClientName	DataFile	Wgt/Vol	Injection Time	Dil	Anal	ALS	Comments
solvblk		a2001.d	1000.00 ml	11-NOV-2014 14:55	1.000	dlb	1	HMXRDX
1400		a2002.d	1000.00 ml	11-NOV-2014 15:57	1.000	dlb	1	all
1371565		a2003.d	1000.00 ml	11-NOV-2014 16:59	1.000	dlb	1	231734LQC
1371566		a2004.d	1000.00 ml	11-NOV-2014 18:01	1.000	dlb	1	231734LQC
1372722		a2004dod.d	1000.00 ml	11-NOV-2014 18:01	1.000	dlb	1	all
1371567		a2005.d	1000.00 ml	11-NOV-2014 19:03	1.000	dlb	1	231734LQC
1372723		a2005dod.d	1000.00 ml	11-NOV-2014 19:03	1.000	dlb	1	all
21410171308		a2006.d	1000.00 ml	11-NOV-2014 20:04	1.000	dlb	1	all
1379392		a2007.d	1000.00 ml	11-NOV-2014 21:06	1.000	dlb	1	HMXRDX
1379393		a2008.d	1000.00 ml	11-NOV-2014 22:08	1.000	dlb	1	HMXRDX
1379394		a2009.d	1000.00 ml	11-NOV-2014 23:10	1.000	dlb	1	HMXRDX
1400		a2010.d	1000.00 ml	12-NOV-2014 00:12	1.000	dlb	1	all
21411064402		a2011.d	1000.00 ml	12-NOV-2014 01:14	100.000	dlb	1	HMXRDX
21411064402		a2012.d	1000.00 ml	12-NOV-2014 02:16	100.000	dlb	1	HMXRDX
solvblk		a2013.d	1000.00 ml	12-NOV-2014 03:18	1.000	dlb	1	HMXRDX
21411064401		a2014.d	1000.00 ml	12-NOV-2014 04:20	1000.000	dlb	1	HMXRDX
solvblk		a2015.d	1000.00 ml	12-NOV-2014 05:22	1.000	dlb	1	HMXRDX
1400		a2016.d	1000.00 ml	12-NOV-2014 06:23	1.000	dlb	1	HMXRDX
21411064402		a2017.d	1000.00 ml	12-NOV-2014 07:39	1.000	dlb	1	HMXRDX
21411064401		a2018.d	1000.00 ml	12-NOV-2014 08:41	10.000	dlb	1	HMXRDX
1400		a2019.d	1000.00 ml	12-NOV-2014 09:42	1.000	dlb	1	HMXRDX
21411064401		a2020.d	1000.00 ml	12-NOV-2014 10:44	1.000	dlb	1	HMXRDX
1400		a2021.d	1000.00 ml	12-NOV-2014 11:46	1.000	dlb	1	HMXRDX

U.S. EPA - CLP
COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

SOW No.:

EPA Sample No	Lab Sample ID
MA01MW002	21410220501
MA01MW001	21410220503
MA01MW004	21410220504
MA01MW004-a	21410220505
MA01MW003	21410220507
M114MW002	21410220509
M114MW003	21410220511
M114MW004	21410220512
M114MW001	21410220514
MWQ-24	21410220515
MWQ-24-ms	21410220516
MWQ-24-sd	21410220517
MA02MW001D	21410220520
MA01MW002	21410220501
MA01MW001	21410220503
MA01MW004	21410220504
MA01MW004-a	21410220505
MA01MW003	21410220507
M114MW002	21410220509
M114MW003	21410220511
M114MW004	21410220512
M114MW001	21410220514
MWQ-24	21410220515
MWQ-24-ms	21410220516
MWQ-24-sd	21410220517

Were ICP interelement corrections applied ? Yes / No YES

Were ICP background corrections applied ? Yes / No YES

If yes-were raw data generated before application of background corrections ? Yes / No NO

U.S. EPA - CLP
COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

SOW No.:

EPA Sample No	*Lab Sample ID*
MA02MW001D	21410220520

Were ICP interelement corrections applied ?	Yes / No	YES
Were ICP background corrections applied ?	Yes / No	YES
If yes-were raw data generated before application of background corrections ?	Yes / No	NO

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: MA01MW002

Lab Code: LA024 | Case No.: | Contract:

Matrix: (soil / water) Water | SAS No.: | SDG No.: 214102205

Level: (low / med) | % Solids: | Lab Sample ID: 21410220501

Date Received: 10/22/14 | Time: 0920 | Date Collected: 10/21/14 | Time: 1040

Analyte	Conc.	Units	C	MDL	LOD	LOQ	Method	Type	Analyzed
Aluminum	26.1	ug/L	J	25.0	25.0	100	SW-846 6020A	MS	10/31/14 2356
Antimony	2.50	ug/L	U	2.50	2.50	10.0	SW-846 6020A	MS	10/31/14 2356
Arsenic	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A	MS	10/31/14 2356
Barium	14.0	ug/L		1.25	1.25	5.00	SW-846 6020A	MS	10/31/14 2356
Beryllium	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A	MS	10/31/14 2356
Cadmium	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A	MS	10/31/14 2356
Calcium	44400	ug/L		625	625	2500	SW-846 6020A	MS	10/31/14 2356
Chromium	1.70	ug/L	J	1.25	1.25	5.00	SW-846 6020A	MS	10/31/14 2356
Cobalt	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A	MS	10/31/14 2356
Copper	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A	MS	10/31/14 2356
Iron	125	ug/L	U	125	125	500	SW-846 6020A	MS	10/31/14 2356
Lead	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A	MS	10/31/14 2356
Magnesium	37400	ug/L		125	125	500	SW-846 6020A	MS	10/31/14 2356
Manganese	6.25	ug/L	U	6.25	6.25	25.0	SW-846 6020A	MS	10/31/14 2356
Mercury	0.070	ug/L	U	0.070	0.070	0.20	SW-846 7470A	AV	10/23/14 1508
Molybdenum	6.40	ug/L		1.25	1.25	5.00	SW-846 6020A	MS	10/31/14 2356
Nickel	2.50	ug/L	U	2.50	2.50	10.0	SW-846 6020A	MS	10/31/14 2356
Potassium	5960	ug/L		125	125	500	SW-846 6020A	MS	10/31/14 2356
Selenium	4.79	ug/L	J	1.25	1.25	5.00	SW-846 6020A	MS	10/31/14 2356
Silver	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A	MS	10/31/14 2356
Sodium	503000	ug/L		2500	2500	10000	SW-846 6020A	MS	10/31/14 2349
Thallium	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A	MS	10/31/14 2356
Titanium	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A	MS	10/31/14 2356
Vanadium	11.5	ug/L		1.25	1.25	5.00	SW-846 6020A	MS	10/31/14 2356
Zinc	25.0	ug/L	U	25.0	25.0	100	SW-846 6020A	MS	11/03/14 2047

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: MA01MW002

Lab Code: LA024 | Case No.: | Contract:

Matrix: (soil / water) Water | SAS No.: | SDG No.: 214102205

Level: (low / med) | % Solids: | Lab Sample ID: 21410220501

Date Received: 10/22/14 | Time: 0920 | Date Collected: 10/21/14 | Time: 1040

Analyte	Conc.	Units	C	MDL	LOD	LOQ	Method	Type	Analyzed
Aluminum (D	25.0	ug/L	U	25.0	25.0	100	SW-846 6020A Dissolved	MS	10/31/14 0050
Antimony (Di	2.50	ug/L	U	2.50	2.50	10.0	SW-846 6020A Dissolved	MS	10/31/14 0050
Arsenic (Diss	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0050
Barium (Diss	14.1	ug/L		1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0050
Beryllium (Di	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0050
Cadmium (Di	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0050
Calcium (Dis	44400	ug/L		625	625	2500	SW-846 6020A Dissolved	MS	10/31/14 0050
Chromium (D	1.45	ug/L	J	1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0050
Cobalt (Diss	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0050
Copper (Diss	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0050
Iron (Dissolv	125	ug/L	U	125	125	500	SW-846 6020A Dissolved	MS	10/31/14 0050
Lead (Dissol	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0050
Magnesium (	36800	ug/L		125	125	500	SW-846 6020A Dissolved	MS	10/31/14 0050
Manganese (	6.25	ug/L	U	6.25	6.25	25.0	SW-846 6020A Dissolved	MS	10/31/14 0050
Mercury (Dis	0.070	ug/L	U	0.070	0.070	0.20	SW-846 7470A Dissolved	AV	10/27/14 1503
Molybdenum	6.67	ug/L		1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0050
Nickel (Disso	2.50	ug/L	U	2.50	2.50	10.0	SW-846 6020A Dissolved	MS	10/31/14 0050
Potassium (	6020	ug/L		125	125	500	SW-846 6020A Dissolved	MS	10/31/14 0050
Selenium (Di	4.61	ug/L	J	1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0050
Silver (Dissol	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0050
Sodium (Diss	490000	ug/L		2500	2500	10000	SW-846 6020A Dissolved	MS	10/31/14 0013
Thallium (Dis	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0050
Titanium (Dis	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0050
Vanadium (D	11.5	ug/L		1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0050
Zinc (Dissolv	25.0	ug/L	U	25.0	25.0	100	SW-846 6020A Dissolved	MS	10/31/14 0050

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: MA01MW001

Lab Code: LA024 | Case No.: | Contract:

Matrix: (soil / water) Water | SAS No.: | SDG No.: 214102205

Level: (low / med) | % Solids: | Lab Sample ID: 21410220503

Date Received: 10/22/14 | Time: 0920 | Date Collected: 10/21/14 | Time: 1220

Analyte	Conc.	Units	C	MDL	LOD	LOQ	Method	Type	Analyzed
Aluminum	25.0	ug/L	U	25.0	25.0	100	SW-846 6020A	MS	11/01/14 0018
Antimony	2.50	ug/L	U	2.50	2.50	10.0	SW-846 6020A	MS	11/01/14 0018
Arsenic	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A	MS	11/01/14 0018
Barium	12.6	ug/L		1.25	1.25	5.00	SW-846 6020A	MS	11/01/14 0018
Beryllium	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A	MS	11/01/14 0018
Cadmium	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A	MS	11/01/14 0018
Calcium	52700	ug/L		625	625	2500	SW-846 6020A	MS	11/01/14 0018
Chromium	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A	MS	11/01/14 0018
Cobalt	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A	MS	11/01/14 0018
Copper	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A	MS	11/01/14 0018
Iron	125	ug/L	U	125	125	500	SW-846 6020A	MS	11/01/14 0018
Lead	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A	MS	11/01/14 0018
Magnesium	45800	ug/L		125	125	500	SW-846 6020A	MS	11/01/14 0018
Manganese	6.25	ug/L	U	6.25	6.25	25.0	SW-846 6020A	MS	11/01/14 0018
Mercury	0.070	ug/L	U	0.070	0.070	0.20	SW-846 7470A	AV	10/23/14 1510
Molybdenum	5.63	ug/L		1.25	1.25	5.00	SW-846 6020A	MS	11/01/14 0018
Nickel	2.50	ug/L	U	2.50	2.50	10.0	SW-846 6020A	MS	11/01/14 0018
Potassium	6330	ug/L		125	125	500	SW-846 6020A	MS	11/01/14 0018
Selenium	4.59	ug/L	J	1.25	1.25	5.00	SW-846 6020A	MS	11/01/14 0018
Silver	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A	MS	11/01/14 0018
Sodium	605000	ug/L		2500	2500	10000	SW-846 6020A	MS	11/01/14 0011
Thallium	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A	MS	11/01/14 0018
Titanium	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A	MS	11/01/14 0018
Vanadium	12.0	ug/L		1.25	1.25	5.00	SW-846 6020A	MS	11/01/14 0018
Zinc	25.0	ug/L	U	25.0	25.0	100	SW-846 6020A	MS	11/03/14 2050

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: MA01MW001

Lab Code: LA024 | Case No.: | Contract:

Matrix: (soil / water) Water | SAS No.: | SDG No.: 214102205

Level: (low / med) | % Solids: | Lab Sample ID: 21410220503

Date Received: 10/22/14 | Time: 0920 | Date Collected: 10/21/14 | Time: 1220

Analyte	Conc.	Units	C	MDL	LOD	LOQ	Method	Type	Analyzed
Aluminum (D	25.0	ug/L	U	25.0	25.0	100	SW-846 6020A Dissolved	MS	10/31/14 0226
Antimony (Di	2.50	ug/L	U	2.50	2.50	10.0	SW-846 6020A Dissolved	MS	10/31/14 0226
Arsenic (Diss	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0226
Barium (Diss	11.1	ug/L		1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0226
Beryllium (Di	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0226
Cadmium (Di	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0226
Calcium (Dis	47600	ug/L		625	625	2500	SW-846 6020A Dissolved	MS	10/31/14 0226
Chromium (D	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0226
Cobalt (Diss	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0226
Copper (Diss	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0226
Iron (Dissolv	125	ug/L	U	125	125	500	SW-846 6020A Dissolved	MS	10/31/14 0226
Lead (Dissol	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0226
Magnesium (	40700	ug/L		125	125	500	SW-846 6020A Dissolved	MS	10/31/14 0226
Manganese (	6.25	ug/L	U	6.25	6.25	25.0	SW-846 6020A Dissolved	MS	10/31/14 0226
Mercury (Dis	0.070	ug/L	U	0.070	0.070	0.20	SW-846 7470A Dissolved	AV	10/27/14 1505
Molybdenum	5.44	ug/L		1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0226
Nickel (Disso	2.50	ug/L	U	2.50	2.50	10.0	SW-846 6020A Dissolved	MS	10/31/14 0226
Potassium (	5740	ug/L		125	125	500	SW-846 6020A Dissolved	MS	10/31/14 0226
Selenium (Di	4.24	ug/L	J	1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0226
Silver (Dissol	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0226
Sodium (Diss	534000	ug/L		2500	2500	10000	SW-846 6020A Dissolved	MS	10/31/14 0156
Thallium (Dis	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0226
Titanium (Dis	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0226
Vanadium (D	11.0	ug/L		1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0226
Zinc (Dissolv	25.0	ug/L	U	25.0	25.0	100	SW-846 6020A Dissolved	MS	10/31/14 0226

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: MA01MW004

Lab Code: LA024 | Case No.: | Contract:

Matrix: (soil / water) Water | SAS No.: | SDG No.: 214102205

Level: (low / med) | % Solids: | Lab Sample ID: 21410220504

Date Received: 10/22/14 | Time: 0920 | Date Collected: 10/21/14 | Time: 1100

Analyte	Conc.	Units	C	MDL	LOD	LOQ	Method	Type	Analyzed
Aluminum	10.0	ug/L	U	10.0	10.0	40.0	SW-846 6020A	MS	11/01/14 0118
Antimony	1.00	ug/L	U	1.00	1.00	4.00	SW-846 6020A	MS	11/01/14 0118
Arsenic	1.39	ug/L	J	0.50	0.50	2.00	SW-846 6020A	MS	11/01/14 0118
Barium	19.9	ug/L		0.50	0.50	2.00	SW-846 6020A	MS	11/01/14 0118
Beryllium	0.50	ug/L	U	0.50	0.50	2.00	SW-846 6020A	MS	11/01/14 0118
Cadmium	0.50	ug/L	U	0.50	0.50	2.00	SW-846 6020A	MS	11/01/14 0118
Calcium	40800	ug/L		250	250	1000	SW-846 6020A	MS	11/01/14 0118
Chromium	0.79	ug/L	J	0.50	0.50	2.00	SW-846 6020A	MS	11/01/14 0118
Cobalt	0.50	ug/L	U	0.50	0.50	2.00	SW-846 6020A	MS	11/01/14 0118
Copper	1.45	ug/L	J	0.50	0.50	2.00	SW-846 6020A	MS	11/01/14 0118
Iron	50.0	ug/L	U	50.0	50.0	200	SW-846 6020A	MS	11/01/14 0118
Lead	0.50	ug/L	U	0.50	0.50	2.00	SW-846 6020A	MS	11/01/14 0118
Magnesium	35300	ug/L		2500	2500	10000	SW-846 6020A	MS	11/01/14 0110
Manganese	2.50	ug/L	U	2.50	2.50	10.0	SW-846 6020A	MS	11/01/14 0118
Mercury	0.070	ug/L	U	0.070	0.070	0.20	SW-846 7470A	AV	10/23/14 1512
Molybdenum	5.59	ug/L		0.50	0.50	2.00	SW-846 6020A	MS	11/01/14 0118
Nickel	1.00	ug/L	U	1.00	1.00	4.00	SW-846 6020A	MS	11/01/14 0118
Potassium	5530	ug/L		50.0	50.0	200	SW-846 6020A	MS	11/01/14 0118
Selenium	6.35	ug/L		0.50	0.50	2.00	SW-846 6020A	MS	11/01/14 0118
Silver	0.50	ug/L	U	0.50	0.50	2.00	SW-846 6020A	MS	11/01/14 0118
Sodium	305000	ug/L		2500	2500	10000	SW-846 6020A	MS	11/01/14 0110
Thallium	0.50	ug/L	U	0.50	0.50	2.00	SW-846 6020A	MS	11/01/14 0118
Titanium	0.50	ug/L	U	0.50	0.50	2.00	SW-846 6020A	MS	11/01/14 0118
Vanadium	18.0	ug/L		0.50	0.50	2.00	SW-846 6020A	MS	11/01/14 0118
Zinc	11.7	ug/L	J	10.0	10.0	40.0	SW-846 6020A	MS	11/03/14 2052

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: MA01MW004

Lab Code: LA024 | Case No.: | Contract:

Matrix: (soil / water) Water | SAS No.: | SDG No.: 214102205

Level: (low / med) | % Solids: | Lab Sample ID: 21410220504

Date Received: 10/22/14 | Time: 0920 | Date Collected: 10/21/14 | Time: 1100

Analyte	Conc.	Units	C	MDL	LOD	LOQ	Method	Type	Analyzed
Aluminum (D	10.0	ug/L	U	10.0	10.0	40.0	SW-846 6020A Dissolved	MS	10/31/14 0241
Antimony (Di	1.00	ug/L	U	1.00	1.00	4.00	SW-846 6020A Dissolved	MS	10/31/14 0241
Arsenic (Diss	1.40	ug/L	J	0.50	0.50	2.00	SW-846 6020A Dissolved	MS	10/31/14 0241
Barium (Diss	20.3	ug/L		0.50	0.50	2.00	SW-846 6020A Dissolved	MS	10/31/14 0241
Beryllium (Di	0.50	ug/L	U	0.50	0.50	2.00	SW-846 6020A Dissolved	MS	10/31/14 0241
Cadmium (Di	0.50	ug/L	U	0.50	0.50	2.00	SW-846 6020A Dissolved	MS	10/31/14 0241
Calcium (Dis	41400	ug/L		250	250	1000	SW-846 6020A Dissolved	MS	10/31/14 0241
Chromium (D	0.66	ug/L	J	0.50	0.50	2.00	SW-846 6020A Dissolved	MS	10/31/14 0241
Cobalt (Diss	0.50	ug/L	U	0.50	0.50	2.00	SW-846 6020A Dissolved	MS	10/31/14 0241
Copper (Diss	1.78	ug/L	J	0.50	0.50	2.00	SW-846 6020A Dissolved	MS	10/31/14 0241
Iron (Dissolv	50.0	ug/L	U	50.0	50.0	200	SW-846 6020A Dissolved	MS	10/31/14 0241
Lead (Dissol	0.50	ug/L	U	0.50	0.50	2.00	SW-846 6020A Dissolved	MS	10/31/14 0241
Magnesium (	34800	ug/L		2500	2500	10000	SW-846 6020A Dissolved	MS	10/31/14 0234
Manganese (	2.50	ug/L	U	2.50	2.50	10.0	SW-846 6020A Dissolved	MS	10/31/14 0241
Mercury (Dis	0.070	ug/L	U	0.070	0.070	0.20	SW-846 7470A Dissolved	AV	10/27/14 1507
Molybdenum	5.52	ug/L		0.50	0.50	2.00	SW-846 6020A Dissolved	MS	10/31/14 0241
Nickel (Disso	1.00	ug/L	U	1.00	1.00	4.00	SW-846 6020A Dissolved	MS	10/31/14 0241
Potassium (	5740	ug/L		50.0	50.0	200	SW-846 6020A Dissolved	MS	10/31/14 0241
Selenium (Di	6.81	ug/L		0.50	0.50	2.00	SW-846 6020A Dissolved	MS	10/31/14 0241
Silver (Dissol	0.50	ug/L	U	0.50	0.50	2.00	SW-846 6020A Dissolved	MS	10/31/14 0241
Sodium (Diss	306000	ug/L		2500	2500	10000	SW-846 6020A Dissolved	MS	10/31/14 0234
Thallium (Dis	0.50	ug/L	U	0.50	0.50	2.00	SW-846 6020A Dissolved	MS	10/31/14 0241
Titanium (Dis	0.50	ug/L	U	0.50	0.50	2.00	SW-846 6020A Dissolved	MS	10/31/14 0241
Vanadium (D	17.7	ug/L		0.50	0.50	2.00	SW-846 6020A Dissolved	MS	10/31/14 0241
Zinc (Dissolv	10.9	ug/L	J	10.0	10.0	40.0	SW-846 6020A Dissolved	MS	10/31/14 0241

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: MA01MW004-a

Lab Code: LA024 | Case No.: | Contract:

Matrix: (soil / water) Water | SAS No.: | SDG No.: 214102205

Level: (low / med) | % Solids: | Lab Sample ID: 21410220505

Date Received: 10/22/14 | Time: 0920 | Date Collected: 10/21/14 | Time: 1100

Analyte	Conc.	Units	C	MDL	LOD	LOQ	Method	Type	Analyzed
Aluminum	10.3	ug/L	J	10.0	10.0	40.0	SW-846 6020A	MS	11/01/14 0140
Antimony	1.00	ug/L	U	1.00	1.00	4.00	SW-846 6020A	MS	11/01/14 0140
Arsenic	1.46	ug/L	J	0.50	0.50	2.00	SW-846 6020A	MS	11/01/14 0140
Barium	20.7	ug/L		0.50	0.50	2.00	SW-846 6020A	MS	11/01/14 0140
Beryllium	0.50	ug/L	U	0.50	0.50	2.00	SW-846 6020A	MS	11/01/14 0140
Cadmium	0.50	ug/L	U	0.50	0.50	2.00	SW-846 6020A	MS	11/01/14 0140
Calcium	43000	ug/L		250	250	1000	SW-846 6020A	MS	11/01/14 0140
Chromium	0.78	ug/L	J	0.50	0.50	2.00	SW-846 6020A	MS	11/01/14 0140
Cobalt	0.50	ug/L	U	0.50	0.50	2.00	SW-846 6020A	MS	11/01/14 0140
Copper	1.34	ug/L	J	0.50	0.50	2.00	SW-846 6020A	MS	11/01/14 0140
Iron	50.0	ug/L	U	50.0	50.0	200	SW-846 6020A	MS	11/01/14 0140
Lead	0.50	ug/L	U	0.50	0.50	2.00	SW-846 6020A	MS	11/01/14 0140
Magnesium	38500	ug/L		2500	2500	10000	SW-846 6020A	MS	11/01/14 0133
Manganese	2.50	ug/L	U	2.50	2.50	10.0	SW-846 6020A	MS	11/01/14 0140
Mercury	0.08366	ug/L	J	0.070	0.070	0.20	SW-846 7470A	AV	10/23/14 1513
Molybdenum	5.87	ug/L		0.50	0.50	2.00	SW-846 6020A	MS	11/01/14 0140
Nickel	1.00	ug/L	U	1.00	1.00	4.00	SW-846 6020A	MS	11/01/14 0140
Potassium	5790	ug/L		50.0	50.0	200	SW-846 6020A	MS	11/01/14 0140
Selenium	6.80	ug/L		0.50	0.50	2.00	SW-846 6020A	MS	11/01/14 0140
Silver	0.50	ug/L	U	0.50	0.50	2.00	SW-846 6020A	MS	11/01/14 0140
Sodium	336000	ug/L		2500	2500	10000	SW-846 6020A	MS	11/01/14 0133
Thallium	0.50	ug/L	U	0.50	0.50	2.00	SW-846 6020A	MS	11/01/14 0140
Titanium	0.50	ug/L	U	0.50	0.50	2.00	SW-846 6020A	MS	11/01/14 0140
Vanadium	18.6	ug/L		0.50	0.50	2.00	SW-846 6020A	MS	11/01/14 0140
Zinc	10.0	ug/L	U	10.0	10.0	40.0	SW-846 6020A	MS	11/03/14 2055

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: MA01MW004-a

Lab Code: LA024 | Case No.: | Contract:

Matrix: (soil / water) Water | SAS No.: | SDG No.: 214102205

Level: (low / med) | % Solids: | Lab Sample ID: 21410220505

Date Received: 10/22/14 | Time: 0920 | Date Collected: 10/21/14 | Time: 1100

Analyte	Conc.	Units	C	MDL	LOD	LOQ	Method	Type	Analyzed
Aluminum (D	10.0	ug/L	U	10.0	10.0	40.0	SW-846 6020A Dissolved	MS	10/31/14 0256
Antimony (Di	1.00	ug/L	U	1.00	1.00	4.00	SW-846 6020A Dissolved	MS	10/31/14 0256
Arsenic (Diss	1.31	ug/L	J	0.50	0.50	2.00	SW-846 6020A Dissolved	MS	10/31/14 0256
Barium (Diss	19.1	ug/L		0.50	0.50	2.00	SW-846 6020A Dissolved	MS	10/31/14 0256
Beryllium (Di	0.50	ug/L	U	0.50	0.50	2.00	SW-846 6020A Dissolved	MS	10/31/14 0256
Cadmium (Di	0.50	ug/L	U	0.50	0.50	2.00	SW-846 6020A Dissolved	MS	10/31/14 0256
Calcium (Dis	40100	ug/L		250	250	1000	SW-846 6020A Dissolved	MS	10/31/14 0256
Chromium (D	0.63	ug/L	J	0.50	0.50	2.00	SW-846 6020A Dissolved	MS	10/31/14 0256
Cobalt (Diss	0.50	ug/L	U	0.50	0.50	2.00	SW-846 6020A Dissolved	MS	10/31/14 0256
Copper (Diss	1.40	ug/L	J	0.50	0.50	2.00	SW-846 6020A Dissolved	MS	10/31/14 0256
Iron (Dissolv	50.0	ug/L	U	50.0	50.0	200	SW-846 6020A Dissolved	MS	10/31/14 0256
Lead (Dissol	0.50	ug/L	U	0.50	0.50	2.00	SW-846 6020A Dissolved	MS	10/31/14 0256
Magnesium (	34900	ug/L		2500	2500	10000	SW-846 6020A Dissolved	MS	10/31/14 0248
Manganese (	2.50	ug/L	U	2.50	2.50	10.0	SW-846 6020A Dissolved	MS	10/31/14 0256
Mercury (Dis	0.070	ug/L	U	0.070	0.070	0.20	SW-846 7470A Dissolved	AV	10/27/14 1437
Molybdenum	5.33	ug/L		0.50	0.50	2.00	SW-846 6020A Dissolved	MS	10/31/14 0256
Nickel (Disso	1.00	ug/L	U	1.00	1.00	4.00	SW-846 6020A Dissolved	MS	10/31/14 0256
Potassium (	5480	ug/L		50.0	50.0	200	SW-846 6020A Dissolved	MS	10/31/14 0256
Selenium (Di	6.45	ug/L		0.50	0.50	2.00	SW-846 6020A Dissolved	MS	10/31/14 0256
Silver (Dissol	0.50	ug/L	U	0.50	0.50	2.00	SW-846 6020A Dissolved	MS	10/31/14 0256
Sodium (Diss	309000	ug/L		2500	2500	10000	SW-846 6020A Dissolved	MS	10/31/14 0248
Thallium (Dis	0.50	ug/L	U	0.50	0.50	2.00	SW-846 6020A Dissolved	MS	10/31/14 0256
Titanium (Dis	0.50	ug/L	U	0.50	0.50	2.00	SW-846 6020A Dissolved	MS	10/31/14 0256
Vanadium (D	17.1	ug/L		0.50	0.50	2.00	SW-846 6020A Dissolved	MS	10/31/14 0256
Zinc (Dissolv	10.0	ug/L	U	10.0	10.0	40.0	SW-846 6020A Dissolved	MS	10/31/14 0256

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: MA01MW003

Lab Code: LA024 | Case No.: | Contract:

Matrix: (soil / water) Water | SAS No.: | SDG No.: 214102205

Level: (low / med) | % Solids: | Lab Sample ID: 21410220507

Date Received: 10/22/14 | Time: 0920 | Date Collected: 10/21/14 | Time: 1226

Analyte	Conc.	Units	C	MDL	LOD	LOQ	Method	Type	Analyzed
Aluminum	25.0	ug/L	U	25.0	25.0	100	SW-846 6020A	MS	11/01/14 0202
Antimony	2.50	ug/L	U	2.50	2.50	10.0	SW-846 6020A	MS	11/01/14 0202
Arsenic	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A	MS	11/01/14 0202
Barium	15.0	ug/L		1.25	1.25	5.00	SW-846 6020A	MS	11/01/14 0202
Beryllium	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A	MS	11/01/14 0202
Cadmium	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A	MS	11/01/14 0202
Calcium	69800	ug/L		625	625	2500	SW-846 6020A	MS	11/01/14 0202
Chromium	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A	MS	11/01/14 0202
Cobalt	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A	MS	11/01/14 0202
Copper	1.37	ug/L	J	1.25	1.25	5.00	SW-846 6020A	MS	11/01/14 0202
Iron	125	ug/L	U	125	125	500	SW-846 6020A	MS	11/01/14 0202
Lead	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A	MS	11/01/14 0202
Magnesium	64100	ug/L		2500	2500	10000	SW-846 6020A	MS	11/01/14 0155
Manganese	6.25	ug/L	U	6.25	6.25	25.0	SW-846 6020A	MS	11/01/14 0202
Mercury	0.070	ug/L	U	0.070	0.070	0.20	SW-846 7470A	AV	10/23/14 1515
Molybdenum	3.93	ug/L	J	1.25	1.25	5.00	SW-846 6020A	MS	11/01/14 0202
Nickel	2.50	ug/L	U	2.50	2.50	10.0	SW-846 6020A	MS	11/01/14 0202
Potassium	7180	ug/L		125	125	500	SW-846 6020A	MS	11/01/14 0202
Selenium	4.40	ug/L	J	1.25	1.25	5.00	SW-846 6020A	MS	11/01/14 0202
Silver	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A	MS	11/01/14 0202
Sodium	466000	ug/L		2500	2500	10000	SW-846 6020A	MS	11/01/14 0155
Thallium	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A	MS	11/01/14 0202
Titanium	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A	MS	11/01/14 0202
Vanadium	13.5	ug/L		1.25	1.25	5.00	SW-846 6020A	MS	11/01/14 0202
Zinc	26.3	ug/L	J	25.0	25.0	100	SW-846 6020A	MS	11/03/14 2057

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: MA01MW003

Lab Code: LA024 | Case No.: | Contract:

Matrix: (soil / water) Water | SAS No.: | SDG No.: 214102205

Level: (low / med) | % Solids: | Lab Sample ID: 21410220507

Date Received: 10/22/14 | Time: 0920 | Date Collected: 10/21/14 | Time: 1226

Analyte	Conc.	Units	C	MDL	LOD	LOQ	Method	Type	Analyzed
Aluminum (D	25.0	ug/L	U	25.0	25.0	100	SW-846 6020A Dissolved	MS	10/31/14 0311
Antimony (Di	2.50	ug/L	U	2.50	2.50	10.0	SW-846 6020A Dissolved	MS	10/31/14 0311
Arsenic (Diss	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0311
Barium (Diss	14.7	ug/L		1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0311
Beryllium (Di	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0311
Cadmium (Di	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0311
Calcium (Dis	67200	ug/L		625	625	2500	SW-846 6020A Dissolved	MS	10/31/14 0311
Chromium (D	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0311
Cobalt (Diss	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0311
Copper (Diss	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0311
Iron (Dissolv	125	ug/L	U	125	125	500	SW-846 6020A Dissolved	MS	10/31/14 0311
Lead (Dissol	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0311
Magnesium (	62300	ug/L		2500	2500	10000	SW-846 6020A Dissolved	MS	10/31/14 0303
Manganese (	6.25	ug/L	U	6.25	6.25	25.0	SW-846 6020A Dissolved	MS	10/31/14 0311
Mercury (Dis	0.070	ug/L	U	0.070	0.070	0.20	SW-846 7470A Dissolved	AV	10/27/14 1509
Molybdenum	3.98	ug/L	J	1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0311
Nickel (Disso	2.50	ug/L	U	2.50	2.50	10.0	SW-846 6020A Dissolved	MS	10/31/14 0311
Potassium (	6960	ug/L		125	125	500	SW-846 6020A Dissolved	MS	10/31/14 0311
Selenium (Di	3.79	ug/L	J	1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0311
Silver (Dissol	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0311
Sodium (Diss	449000	ug/L		2500	2500	10000	SW-846 6020A Dissolved	MS	10/31/14 0303
Thallium (Dis	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0311
Titanium (Dis	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0311
Vanadium (D	12.9	ug/L		1.25	1.25	5.00	SW-846 6020A Dissolved	MS	10/31/14 0311
Zinc (Dissolv	25.0	ug/L	U	25.0	25.0	100	SW-846 6020A Dissolved	MS	10/31/14 0311

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: M114MW002

Lab Code: LA024 | Case No.: | Contract:

Matrix: (soil / water) Water | SAS No.: | SDG No.: 214102205

Level: (low / med) | % Solids: | Lab Sample ID: 21410220509

Date Received: 10/23/14 | Time: 0940 | Date Collected: 10/22/14 | Time: 0935

Analyte	Conc.	Units	C	MDL	LOD	LOQ	Method	Type	Analyzed
Aluminum	100	ug/L	U	100	100	400	SW-846 6020A	MS	11/03/14 2237
Antimony	10.0	ug/L	U	10.0	10.0	40.0	SW-846 6020A	MS	11/03/14 2237
Arsenic	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2237
Barium	15.2	ug/L	J	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2237
Beryllium	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2237
Cadmium	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2237
Calcium	346000	ug/L		2500	2500	10000	SW-846 6020A	MS	11/03/14 2237
Chromium	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2237
Cobalt	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2237
Copper	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2237
Iron	500	ug/L	U	500	500	2000	SW-846 6020A	MS	11/03/14 2237
Lead	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2237
Magnesium	264000	ug/L		12500	12500	50000	SW-846 6020A	MS	11/03/14 2230
Manganese	25.0	ug/L	U	25.0	25.0	100	SW-846 6020A	MS	11/03/14 2237
Mercury	0.070	ug/L	U	0.070	0.070	0.20	SW-846 7470A	AV	10/28/14 1153
Molybdenum	14.1	ug/L	J	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2237
Nickel	10.0	ug/L	U	10.0	10.0	40.0	SW-846 6020A	MS	11/03/14 2237
Potassium	14500	ug/L		500	500	2000	SW-846 6020A	MS	11/03/14 2237
Selenium	18.7	ug/L	J	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2237
Silver	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2237
Sodium	2130000	ug/L		12500	12500	50000	SW-846 6020A	MS	11/03/14 2230
Thallium	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2237
Titanium	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2237
Vanadium	7.27	ug/L	J	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2237
Zinc	100	ug/L	U	100	100	400	SW-846 6020A	MS	11/03/14 2237

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: M114MW002

Lab Code: LA024 | Case No.: | Contract:

Matrix: (soil / water) Water | SAS No.: | SDG No.: 214102205

Level: (low / med) | % Solids: | Lab Sample ID: 21410220509

Date Received: 10/23/14 | Time: 0940 | Date Collected: 10/22/14 | Time: 0935

Analyte	Conc.	Units	C	MDL	LOD	LOQ	Method	Type	Analyzed
Aluminum (D	100	ug/L	U	100	100	400	SW-846 6020A Dissolved	MS	11/04/14 1152
Antimony (Di	10.0	ug/L	U	10.0	10.0	40.0	SW-846 6020A Dissolved	MS	11/04/14 1152
Arsenic (Diss	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1152
Barium (Diss	14.3	ug/L	J	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1152
Beryllium (Di	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1152
Cadmium (Di	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1152
Calcium (Dis	340000	ug/L		2500	2500	10000	SW-846 6020A Dissolved	MS	11/04/14 1152
Chromium (D	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1152
Cobalt (Diss	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1152
Copper (Diss	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1152
Iron (Dissolv	500	ug/L	U	500	500	2000	SW-846 6020A Dissolved	MS	11/04/14 1152
Lead (Dissol	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1152
Magnesium (	313000	ug/L		12500	12500	50000	SW-846 6020A Dissolved	MS	11/04/14 1149
Manganese (	25.0	ug/L	U	25.0	25.0	100	SW-846 6020A Dissolved	MS	11/04/14 1152
Mercury (Dis	0.070	ug/L	U	0.070	0.070	0.20	SW-846 7470A Dissolved	AV	10/27/14 1514
Molybdenum	15.7	ug/L	J	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1152
Nickel (Disso	10.0	ug/L	U	10.0	10.0	40.0	SW-846 6020A Dissolved	MS	11/04/14 1152
Potassium (	14400	ug/L		500	500	2000	SW-846 6020A Dissolved	MS	11/04/14 1152
Selenium (Di	15.0	ug/L	J	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1152
Silver (Dissol	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1152
Sodium (Diss	2470000	ug/L		12500	12500	50000	SW-846 6020A Dissolved	MS	11/04/14 1149
Thallium (Dis	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1152
Titanium (Dis	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1152
Vanadium (D	7.92	ug/L	J	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1152
Zinc (Dissolv	100	ug/L	U	100	100	400	SW-846 6020A Dissolved	MS	11/04/14 1152

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: M114MW003

Lab Code: LA024 | Case No.: | Contract:

Matrix: (soil / water) Water | SAS No.: | SDG No.: 214102205

Level: (low / med) | % Solids: | Lab Sample ID: 21410220511

Date Received: 10/23/14 | Time: 0940 | Date Collected: 10/22/14 | Time: 1110

Analyte	Conc.	Units	C	MDL	LOD	LOQ	Method	Type	Analyzed
Aluminum	100	ug/L	U	100	100	400	SW-846 6020A	MS	11/03/14 2252
Antimony	10.0	ug/L	U	10.0	10.0	40.0	SW-846 6020A	MS	11/03/14 2252
Arsenic	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2252
Barium	13.6	ug/L	J	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2252
Beryllium	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2252
Cadmium	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2252
Calcium	413000	ug/L		2500	2500	10000	SW-846 6020A	MS	11/03/14 2252
Chromium	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2252
Cobalt	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2252
Copper	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2252
Iron	500	ug/L	U	500	500	2000	SW-846 6020A	MS	11/03/14 2252
Lead	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2252
Magnesium	293000	ug/L		12500	12500	50000	SW-846 6020A	MS	11/03/14 2244
Manganese	25.0	ug/L	U	25.0	25.0	100	SW-846 6020A	MS	11/03/14 2252
Mercury	0.070	ug/L	U	0.070	0.070	0.20	SW-846 7470A	AV	10/28/14 1154
Molybdenum	7.73	ug/L	J	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2252
Nickel	10.0	ug/L	U	10.0	10.0	40.0	SW-846 6020A	MS	11/03/14 2252
Potassium	14700	ug/L		500	500	2000	SW-846 6020A	MS	11/03/14 2252
Selenium	31.7	ug/L		5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2252
Silver	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2252
Sodium	2640000	ug/L		12500	12500	50000	SW-846 6020A	MS	11/03/14 2244
Thallium	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2252
Titanium	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2252
Vanadium	9.38	ug/L	J	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2252
Zinc	100	ug/L	U	100	100	400	SW-846 6020A	MS	11/03/14 2252

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: M114MW003

Lab Code: LA024 | Case No.: | Contract:

Matrix: (soil / water) Water | SAS No.: | SDG No.: 214102205

Level: (low / med) | % Solids: | Lab Sample ID: 21410220511

Date Received: 10/23/14 | Time: 0940 | Date Collected: 10/22/14 | Time: 1110

Analyte	Conc.	Units	C	MDL	LOD	LOQ	Method	Type	Analyzed
Aluminum (D	100	ug/L	U	100	100	400	SW-846 6020A Dissolved	MS	11/04/14 1220
Antimony (Di	10.0	ug/L	U	10.0	10.0	40.0	SW-846 6020A Dissolved	MS	11/04/14 1220
Arsenic (Diss	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1220
Barium (Diss	12.9	ug/L	J	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1220
Beryllium (Di	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1220
Cadmium (Di	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1220
Calcium (Dis	410000	ug/L		2500	2500	10000	SW-846 6020A Dissolved	MS	11/04/14 1220
Chromium (D	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1220
Cobalt (Diss	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1220
Copper (Diss	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1220
Iron (Dissolv	3590	ug/L		500	500	2000	SW-846 6020A Dissolved	MS	11/04/14 1220
Lead (Dissol	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1220
Magnesium (	328000	ug/L		12500	12500	50000	SW-846 6020A Dissolved	MS	11/04/14 1217
Manganese (	25.0	ug/L	U	25.0	25.0	100	SW-846 6020A Dissolved	MS	11/04/14 1220
Mercury (Dis	0.070	ug/L	U	0.070	0.070	0.20	SW-846 7470A Dissolved	AV	10/27/14 1516
Molybdenum	8.12	ug/L	J	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1220
Nickel (Disso	10.0	ug/L	U	10.0	10.0	40.0	SW-846 6020A Dissolved	MS	11/04/14 1220
Potassium (	14800	ug/L		500	500	2000	SW-846 6020A Dissolved	MS	11/04/14 1220
Selenium (Di	28.7	ug/L		5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1220
Silver (Dissol	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1220
Sodium (Diss	2950000	ug/L		12500	12500	50000	SW-846 6020A Dissolved	MS	11/04/14 1217
Thallium (Dis	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1220
Titanium (Dis	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1220
Vanadium (D	9.77	ug/L	J	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1220
Zinc (Dissolv	100	ug/L	U	100	100	400	SW-846 6020A Dissolved	MS	11/04/14 1220

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: M114MW004

Lab Code: LA024 | Case No.: | Contract:

Matrix: (soil / water) Water | SAS No.: | SDG No.: 214102205

Level: (low / med) | % Solids: | Lab Sample ID: 21410220512

Date Received: 10/23/14 | Time: 0940 | Date Collected: 10/22/14 | Time: 1025

Analyte	Conc.	Units	C	MDL	LOD	LOQ	Method	Type	Analyzed
Aluminum	100	ug/L	U	100	100	400	SW-846 6020A	MS	11/03/14 2307
Antimony	10.0	ug/L	U	10.0	10.0	40.0	SW-846 6020A	MS	11/03/14 2307
Arsenic	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2307
Barium	17.7	ug/L	J	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2307
Beryllium	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2307
Cadmium	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2307
Calcium	402000	ug/L		2500	2500	10000	SW-846 6020A	MS	11/03/14 2307
Chromium	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2307
Cobalt	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2307
Copper	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2307
Iron	500	ug/L	U	500	500	2000	SW-846 6020A	MS	11/03/14 2307
Lead	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2307
Magnesium	316000	ug/L		12500	12500	50000	SW-846 6020A	MS	11/03/14 2259
Manganese	25.0	ug/L	U	25.0	25.0	100	SW-846 6020A	MS	11/03/14 2307
Mercury	0.070	ug/L	U	0.070	0.070	0.20	SW-846 7470A	AV	10/28/14 1156
Molybdenum	10.5	ug/L	J	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2307
Nickel	10.0	ug/L	U	10.0	10.0	40.0	SW-846 6020A	MS	11/03/14 2307
Potassium	15300	ug/L		500	500	2000	SW-846 6020A	MS	11/03/14 2307
Selenium	23.6	ug/L		5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2307
Silver	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2307
Sodium	2380000	ug/L		12500	12500	50000	SW-846 6020A	MS	11/03/14 2259
Thallium	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2307
Titanium	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2307
Vanadium	5.48	ug/L	J	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2307
Zinc	100	ug/L	U	100	100	400	SW-846 6020A	MS	11/03/14 2307

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: M114MW004

Lab Code: LA024 | Case No.: | Contract:

Matrix: (soil / water) Water | SAS No.: | SDG No.: 214102205

Level: (low / med) | % Solids: | Lab Sample ID: 21410220512

Date Received: 10/23/14 | Time: 0940 | Date Collected: 10/22/14 | Time: 1025

Analyte	Conc.	Units	C	MDL	LOD	LOQ	Method	Type	Analyzed
Aluminum (D	100	ug/L	U	100	100	400	SW-846 6020A Dissolved	MS	11/04/14 1225
Antimony (Di	10.0	ug/L	U	10.0	10.0	40.0	SW-846 6020A Dissolved	MS	11/04/14 1225
Arsenic (Diss	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1225
Barium (Diss	15.2	ug/L	J	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1225
Beryllium (Di	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1225
Cadmium (Di	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1225
Calcium (Dis	404000	ug/L		2500	2500	10000	SW-846 6020A Dissolved	MS	11/04/14 1225
Chromium (D	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1225
Cobalt (Diss	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1225
Copper (Diss	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1225
Iron (Dissolv	500	ug/L	U	500	500	2000	SW-846 6020A Dissolved	MS	11/04/14 1225
Lead (Dissol	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1225
Magnesium (	358000	ug/L		12500	12500	50000	SW-846 6020A Dissolved	MS	11/04/14 1222
Manganese (	25.0	ug/L	U	25.0	25.0	100	SW-846 6020A Dissolved	MS	11/04/14 1225
Mercury (Dis	0.070	ug/L	U	0.070	0.070	0.20	SW-846 7470A Dissolved	AV	10/27/14 1517
Molybdenum	11.5	ug/L	J	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1225
Nickel (Disso	10.0	ug/L	U	10.0	10.0	40.0	SW-846 6020A Dissolved	MS	11/04/14 1225
Potassium (	15600	ug/L		500	500	2000	SW-846 6020A Dissolved	MS	11/04/14 1225
Selenium (Di	21.9	ug/L		5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1225
Silver (Dissol	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1225
Sodium (Diss	2620000	ug/L		12500	12500	50000	SW-846 6020A Dissolved	MS	11/04/14 1222
Thallium (Dis	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1225
Titanium (Dis	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1225
Vanadium (D	5.78	ug/L	J	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1225
Zinc (Dissolv	102	ug/L	J	100	100	400	SW-846 6020A Dissolved	MS	11/04/14 1225

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: M114MW001

Lab Code: LA024 | Case No.: | Contract:

Matrix: (soil / water) Water | SAS No.: | SDG No.: 214102205

Level: (low / med) | % Solids: | Lab Sample ID: 21410220514

Date Received: 10/23/14 | Time: 0940 | Date Collected: 10/22/14 | Time: 1235

Analyte	Conc.	Units	C	MDL	LOD	LOQ	Method	Type	Analyzed
Aluminum	50.0	ug/L	U	50.0	50.0	200	SW-846 6020A	MS	11/03/14 2344
Antimony	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2344
Arsenic	2.50	ug/L	U	2.50	2.50	10.0	SW-846 6020A	MS	11/03/14 2344
Barium	18.1	ug/L		2.50	2.50	10.0	SW-846 6020A	MS	11/03/14 2344
Beryllium	2.50	ug/L	U	2.50	2.50	10.0	SW-846 6020A	MS	11/06/14 1508
Cadmium	2.50	ug/L	U	2.50	2.50	10.0	SW-846 6020A	MS	11/03/14 2344
Calcium	317000	ug/L		1250	1250	5000	SW-846 6020A	MS	11/03/14 2344
Chromium	3.92	ug/L	J	2.50	2.50	10.0	SW-846 6020A	MS	11/03/14 2344
Cobalt	2.50	ug/L	U	2.50	2.50	10.0	SW-846 6020A	MS	11/03/14 2344
Copper	2.50	ug/L	U	2.50	2.50	10.0	SW-846 6020A	MS	11/03/14 2344
Iron	250	ug/L	U	250	250	1000	SW-846 6020A	MS	11/03/14 2344
Lead	2.50	ug/L	U	2.50	2.50	10.0	SW-846 6020A	MS	11/03/14 2344
Magnesium	242000	ug/L		12500	12500	50000	SW-846 6020A	MS	11/03/14 2336
Manganese	12.5	ug/L	U	12.5	12.5	50.0	SW-846 6020A	MS	11/03/14 2344
Mercury	0.070	ug/L	U	0.070	0.070	0.20	SW-846 7470A	AV	10/28/14 1158
Molybdenum	16.1	ug/L		2.50	2.50	10.0	SW-846 6020A	MS	11/03/14 2344
Nickel	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	11/03/14 2344
Potassium	13900	ug/L		250	250	1000	SW-846 6020A	MS	11/03/14 2344
Selenium	29.2	ug/L		2.50	2.50	10.0	SW-846 6020A	MS	11/03/14 2344
Silver	2.50	ug/L	U	2.50	2.50	10.0	SW-846 6020A	MS	11/03/14 2344
Sodium	2020000	ug/L		12500	12500	50000	SW-846 6020A	MS	11/03/14 2336
Thallium	2.50	ug/L	U	2.50	2.50	10.0	SW-846 6020A	MS	11/06/14 1508
Titanium	2.50	ug/L	U	2.50	2.50	10.0	SW-846 6020A	MS	11/03/14 2344
Vanadium	6.50	ug/L	J	2.50	2.50	10.0	SW-846 6020A	MS	11/03/14 2344
Zinc	59.7	ug/L	J	50.0	50.0	200	SW-846 6020A	MS	11/03/14 2344

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: M114MW001

Lab Code: LA024 | Case No.: | Contract:

Matrix: (soil / water) Water | SAS No.: | SDG No.: 214102205

Level: (low / med) | % Solids: | Lab Sample ID: 21410220514

Date Received: 10/23/14 | Time: 0940 | Date Collected: 10/22/14 | Time: 1235

Analyte	Conc.	Units	C	MDL	LOD	LOQ	Method	Type	Analyzed
Aluminum (D	50.0	ug/L	U	50.0	50.0	200	SW-846 6020A Dissolved	MS	11/04/14 1230
Antimony (Di	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1230
Arsenic (Diss	2.50	ug/L	U	2.50	2.50	10.0	SW-846 6020A Dissolved	MS	11/04/14 1230
Barium (Diss	14.7	ug/L		2.50	2.50	10.0	SW-846 6020A Dissolved	MS	11/04/14 1230
Beryllium (Di	2.50	ug/L	U	2.50	2.50	10.0	SW-846 6020A Dissolved	MS	11/04/14 1230
Cadmium (Di	2.50	ug/L	U	2.50	2.50	10.0	SW-846 6020A Dissolved	MS	11/04/14 1230
Calcium (Dis	301000	ug/L		1250	1250	5000	SW-846 6020A Dissolved	MS	11/04/14 1230
Chromium (D	3.98	ug/L	J	2.50	2.50	10.0	SW-846 6020A Dissolved	MS	11/04/14 1230
Cobalt (Diss	2.50	ug/L	U	2.50	2.50	10.0	SW-846 6020A Dissolved	MS	11/04/14 1230
Copper (Diss	2.50	ug/L	U	2.50	2.50	10.0	SW-846 6020A Dissolved	MS	11/04/14 1230
Iron (Dissolv	250	ug/L	U	250	250	1000	SW-846 6020A Dissolved	MS	11/04/14 1230
Lead (Dissol	2.50	ug/L	U	2.50	2.50	10.0	SW-846 6020A Dissolved	MS	11/04/14 1230
Magnesium (	283000	ug/L		12500	12500	50000	SW-846 6020A Dissolved	MS	11/04/14 1227
Manganese (	12.5	ug/L	U	12.5	12.5	50.0	SW-846 6020A Dissolved	MS	11/04/14 1230
Mercury (Dis	0.070	ug/L	U	0.070	0.070	0.20	SW-846 7470A Dissolved	AV	10/27/14 1519
Molybdenum	15.1	ug/L		2.50	2.50	10.0	SW-846 6020A Dissolved	MS	11/04/14 1230
Nickel (Disso	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/04/14 1230
Potassium (	13200	ug/L		250	250	1000	SW-846 6020A Dissolved	MS	11/04/14 1230
Selenium (Di	25.8	ug/L		2.50	2.50	10.0	SW-846 6020A Dissolved	MS	11/04/14 1230
Silver (Dissol	2.50	ug/L	U	2.50	2.50	10.0	SW-846 6020A Dissolved	MS	11/04/14 1230
Sodium (Diss	2350000	ug/L		12500	12500	50000	SW-846 6020A Dissolved	MS	11/04/14 1227
Thallium (Dis	2.50	ug/L	U	2.50	2.50	10.0	SW-846 6020A Dissolved	MS	11/04/14 1230
Titanium (Dis	2.50	ug/L	U	2.50	2.50	10.0	SW-846 6020A Dissolved	MS	11/04/14 1230
Vanadium (D	6.58	ug/L	J	2.50	2.50	10.0	SW-846 6020A Dissolved	MS	11/04/14 1230
Zinc (Dissolv	55.3	ug/L	J	50.0	50.0	200	SW-846 6020A Dissolved	MS	11/04/14 1230

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: MWQ-24

Lab Code: LA024 | Case No.: | Contract:

Matrix: (soil / water) Water | SAS No.: | SDG No.: 214102205

Level: (low / med) | % Solids: | Lab Sample ID: 21410220515

Date Received: 10/24/14 | Time: 0935 | Date Collected: 10/23/14 | Time: 0932

Analyte	Conc.	Units	C	MDL	LOD	LOQ	Method	Type	Analyzed
Aluminum	10.3	ug/L	J	5.00	5.00	20.0	SW-846 6020A	MS	10/31/14 0738
Antimony	0.50	ug/L	U	0.50	0.50	2.00	SW-846 6020A	MS	10/31/14 0738
Arsenic	4.77	ug/L		0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0738
Barium	54.8	ug/L		0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0738
Beryllium	0.25	ug/L	U	0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0738
Cadmium	0.25	ug/L	U	0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0738
Calcium	43600	ug/L		125	125	500	SW-846 6020A	MS	10/31/14 0738
Chromium	0.57	ug/L	J	0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0738
Cobalt	0.25	ug/L	U	0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0738
Copper	0.25	ug/L	U	0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0738
Iron	25.0	ug/L	U	25.0	25.0	100	SW-846 6020A	MS	10/31/14 0738
Lead	0.25	ug/L	U	0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0738
Magnesium	21000	ug/L		250	250	1000	SW-846 6020A	MS	10/31/14 0730
Manganese	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A	MS	10/31/14 0738
Mercury	0.070	ug/L	U	0.070	0.070	0.20	SW-846 7470A	AV	10/28/14 1244
Molybdenum	9.50	ug/L		0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0738
Nickel	0.50	ug/L	U	0.50	0.50	2.00	SW-846 6020A	MS	10/31/14 0738
Potassium	3930	ug/L		25.0	25.0	100	SW-846 6020A	MS	10/31/14 0738
Selenium	0.58	ug/L	J	0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0738
Silver	0.25	ug/L	U	0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0738
Sodium	33000	ug/L		250	250	1000	SW-846 6020A	MS	10/31/14 0730
Thallium	0.25	ug/L	U	0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0738
Titanium	0.25	ug/L	U	0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0738
Vanadium	33.4	ug/L		0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0738
Zinc	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	10/31/14 0738

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: MWQ-24

Lab Code: LA024 | Case No.: | Contract:

Matrix: (soil / water) Water | SAS No.: | SDG No.: 214102205

Level: (low / med) | % Solids: | Lab Sample ID: 21410220515

Date Received: 10/24/14 | Time: 0935 | Date Collected: 10/23/14 | Time: 0932

Analyte	Conc.	Units	C	MDL	LOD	LOQ	Method	Type	Analyzed
Aluminum (D	12.7	ug/L	J	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/03/14 1502
Antimony (Di	0.50	ug/L	U	0.50	0.50	2.00	SW-846 6020A Dissolved	MS	11/03/14 1502
Arsenic (Diss	4.92	ug/L		0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1502
Barium (Diss	60.7	ug/L		0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1502
Beryllium (Di	0.25	ug/L	U	0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1502
Cadmium (Di	0.25	ug/L	U	0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1502
Calcium (Dis	47800	ug/L		125	125	500	SW-846 6020A Dissolved	MS	11/03/14 1502
Chromium (D	0.58	ug/L	J	0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1502
Cobalt (Diss	0.25	ug/L	U	0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1502
Copper (Diss	0.25	ug/L	U	0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1502
Iron (Dissolv	25.0	ug/L	U	25.0	25.0	100	SW-846 6020A Dissolved	MS	11/03/14 1502
Lead (Dissol	0.25	ug/L	U	0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1502
Magnesium (	23600	ug/L		250	250	1000	SW-846 6020A Dissolved	MS	11/03/14 1455
Manganese (	1.25	ug/L	U	1.25	1.25	5.00	SW-846 6020A Dissolved	MS	11/03/14 1502
Mercury (Dis	0.070	ug/L	U	0.070	0.070	0.20	SW-846 7470A Dissolved	AV	10/28/14 1246
Molybdenum	9.93	ug/L		0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1502
Nickel (Disso	0.50	ug/L	U	0.50	0.50	2.00	SW-846 6020A Dissolved	MS	11/03/14 1502
Potassium (	4420	ug/L		25.0	25.0	100	SW-846 6020A Dissolved	MS	11/03/14 1502
Selenium (Di	0.65	ug/L	J	0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1502
Silver (Dissol	0.25	ug/L	U	0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1502
Sodium (Diss	37000	ug/L		250	250	1000	SW-846 6020A Dissolved	MS	11/03/14 1455
Thallium (Dis	0.25	ug/L	U	0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1502
Titanium (Dis	0.25	ug/L	U	0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1502
Vanadium (D	34.6	ug/L		0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1502
Zinc (Dissolv	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/03/14 1502

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: MWQ-24-ms

Lab Code: LA024 | Case No.: | Contract:

Matrix: (soil / water) Water | SAS No.: | SDG No.: 214102205

Level: (low / med) | % Solids: | Lab Sample ID: 21410220516

Date Received: 10/24/14 | Time: 0935 | Date Collected: 10/23/14 | Time: 0932

Analyte	Conc.	Units	C	MDL	LOD	LOQ	Method	Type	Analyzed
Aluminum	929	ug/L		5.00	5.00	20.0	SW-846 6020A	MS	10/31/14 0807
Antimony	102	ug/L		0.50	0.50	2.00	SW-846 6020A	MS	10/31/14 0807
Arsenic	55.0	ug/L		0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0807
Barium	102	ug/L		0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0807
Beryllium	45.8	ug/L		0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0807
Cadmium	47.4	ug/L		0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0807
Calcium	65900	ug/L		125	125	500	SW-846 6020A	MS	10/31/14 0807
Chromium	50.5	ug/L		0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0807
Cobalt	50.3	ug/L		0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0807
Copper	50.2	ug/L		0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0807
Iron	5000	ug/L		25.0	25.0	100	SW-846 6020A	MS	10/31/14 0807
Lead	49.9	ug/L		0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0807
Magnesium	25100	ug/L		250	250	1000	SW-846 6020A	MS	10/31/14 0800
Manganese	51.9	ug/L		1.25	1.25	5.00	SW-846 6020A	MS	10/31/14 0807
Mercury	4.69	ug/L		0.070	0.070	0.20	SW-846 7470A	AV	10/28/14 1248
Molybdenum	59.0	ug/L		0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0807
Nickel	99.9	ug/L		0.50	0.50	2.00	SW-846 6020A	MS	10/31/14 0807
Potassium	8750	ug/L		25.0	25.0	100	SW-846 6020A	MS	10/31/14 0807
Selenium	10.2	ug/L		0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0807
Silver	52.7	ug/L		0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0807
Sodium	36700	ug/L		250	250	1000	SW-846 6020A	MS	10/31/14 0800
Thallium	48.1	ug/L		0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0807
Titanium	48.6	ug/L		0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0807
Vanadium	82.8	ug/L		0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0807
Zinc	977	ug/L		5.00	5.00	20.0	SW-846 6020A	MS	10/31/14 0807

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: MWQ-24-ms

Lab Code: LA024 | Case No.: | Contract:

Matrix: (soil / water) Water | SAS No.: | SDG No.: 214102205

Level: (low / med) | % Solids: | Lab Sample ID: 21410220516

Date Received: 10/24/14 | Time: 0935 | Date Collected: 10/23/14 | Time: 0932

Analyte	Conc.	Units	C	MDL	LOD	LOQ	Method	Type	Analyzed
Aluminum (D	1040	ug/L		5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/03/14 1517
Antimony (Di	112	ug/L		0.50	0.50	2.00	SW-846 6020A Dissolved	MS	11/03/14 1517
Arsenic (Diss	57.7	ug/L		0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1517
Barium (Diss	116	ug/L		0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1517
Beryllium (Di	48.6	ug/L		0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1517
Cadmium (Di	55.0	ug/L		0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1517
Calcium (Dis	72400	ug/L		125	125	500	SW-846 6020A Dissolved	MS	11/03/14 1517
Chromium (D	51.4	ug/L		0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1517
Cobalt (Diss	50.1	ug/L		0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1517
Copper (Diss	48.9	ug/L		0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1517
Iron (Dissolv	5090	ug/L		25.0	25.0	100	SW-846 6020A Dissolved	MS	11/03/14 1517
Lead (Dissol	52.1	ug/L		0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1517
Magnesium (	28000	ug/L		250	250	1000	SW-846 6020A Dissolved	MS	11/03/14 1510
Manganese (	49.9	ug/L		1.25	1.25	5.00	SW-846 6020A Dissolved	MS	11/03/14 1517
Mercury (Dis	4.36	ug/L		0.070	0.070	0.20	SW-846 7470A Dissolved	AV	10/28/14 1250
Molybdenum	64.1	ug/L		0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1517
Nickel (Disso	98.5	ug/L		0.50	0.50	2.00	SW-846 6020A Dissolved	MS	11/03/14 1517
Potassium (	9700	ug/L		25.0	25.0	100	SW-846 6020A Dissolved	MS	11/03/14 1517
Selenium (Di	11.4	ug/L		0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1517
Silver (Dissol	44.9	ug/L		0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1517
Sodium (Diss	41100	ug/L		250	250	1000	SW-846 6020A Dissolved	MS	11/03/14 1510
Thallium (Dis	46.5	ug/L		0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1517
Titanium (Dis	51.0	ug/L		0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1517
Vanadium (D	85.8	ug/L		0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1517
Zinc (Dissolv	1020	ug/L		5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/03/14 1517

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: MWQ-24-sd

Lab Code: LA024 | Case No.: | Contract:

Matrix: (soil / water) Water | SAS No.: | SDG No.: 214102205

Level: (low / med) | % Solids: | Lab Sample ID: 21410220517

Date Received: 10/24/14 | Time: 0935 | Date Collected: 10/23/14 | Time: 0932

Analyte	Conc.	Units	C	MDL	LOD	LOQ	Method	Type	Analyzed
Aluminum	904	ug/L		5.00	5.00	20.0	SW-846 6020A	MS	10/31/14 0822
Antimony	101	ug/L		0.50	0.50	2.00	SW-846 6020A	MS	10/31/14 0822
Arsenic	53.9	ug/L		0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0822
Barium	103	ug/L		0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0822
Beryllium	44.7	ug/L		0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0822
Cadmium	47.2	ug/L		0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0822
Calcium	67000	ug/L		125	125	500	SW-846 6020A	MS	10/31/14 0822
Chromium	49.5	ug/L		0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0822
Cobalt	49.1	ug/L		0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0822
Copper	49.1	ug/L		0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0822
Iron	4870	ug/L		25.0	25.0	100	SW-846 6020A	MS	10/31/14 0822
Lead	49.2	ug/L		0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0822
Magnesium	26000	ug/L		250	250	1000	SW-846 6020A	MS	10/31/14 0815
Manganese	50.7	ug/L		1.25	1.25	5.00	SW-846 6020A	MS	10/31/14 0822
Mercury	4.34	ug/L		0.070	0.070	0.20	SW-846 7470A	AV	10/28/14 1253
Molybdenum	58.3	ug/L		0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0822
Nickel	97.9	ug/L		0.50	0.50	2.00	SW-846 6020A	MS	10/31/14 0822
Potassium	8820	ug/L		25.0	25.0	100	SW-846 6020A	MS	10/31/14 0822
Selenium	10.4	ug/L		0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0822
Silver	52.1	ug/L		0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0822
Sodium	38400	ug/L		250	250	1000	SW-846 6020A	MS	10/31/14 0815
Thallium	47.4	ug/L		0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0822
Titanium	48.7	ug/L		0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0822
Vanadium	83.1	ug/L		0.25	0.25	1.00	SW-846 6020A	MS	10/31/14 0822
Zinc	957	ug/L		5.00	5.00	20.0	SW-846 6020A	MS	10/31/14 0822

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: MWQ-24-sd

Lab Code: LA024 | Case No.: | Contract:

Matrix: (soil / water) Water | SAS No.: | SDG No.: 214102205

Level: (low / med) | % Solids: | Lab Sample ID: 21410220517

Date Received: 10/24/14 | Time: 0935 | Date Collected: 10/23/14 | Time: 0932

Analyte	Conc.	Units	C	MDL	LOD	LOQ	Method	Type	Analyzed
Aluminum (D	989	ug/L		5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/03/14 1532
Antimony (Di	105	ug/L		0.50	0.50	2.00	SW-846 6020A Dissolved	MS	11/03/14 1532
Arsenic (Diss	55.2	ug/L		0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1532
Barium (Diss	113	ug/L		0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1532
Beryllium (Di	44.8	ug/L		0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1532
Cadmium (Di	51.5	ug/L		0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1532
Calcium (Dis	71400	ug/L		125	125	500	SW-846 6020A Dissolved	MS	11/03/14 1532
Chromium (D	48.7	ug/L		0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1532
Cobalt (Diss	47.2	ug/L		0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1532
Copper (Diss	46.2	ug/L		0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1532
Iron (Dissolv	4780	ug/L		25.0	25.0	100	SW-846 6020A Dissolved	MS	11/03/14 1532
Lead (Dissol	48.6	ug/L		0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1532
Magnesium (	27500	ug/L		250	250	1000	SW-846 6020A Dissolved	MS	11/03/14 1525
Manganese (	47.3	ug/L		1.25	1.25	5.00	SW-846 6020A Dissolved	MS	11/03/14 1532
Mercury (Dis	4.78	ug/L		0.070	0.070	0.20	SW-846 7470A Dissolved	AV	10/28/14 1251
Molybdenum	60.5	ug/L		0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1532
Nickel (Disso	93.5	ug/L		0.50	0.50	2.00	SW-846 6020A Dissolved	MS	11/03/14 1532
Potassium (	9420	ug/L		25.0	25.0	100	SW-846 6020A Dissolved	MS	11/03/14 1532
Selenium (Di	10.7	ug/L		0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1532
Silver (Dissol	43.4	ug/L		0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1532
Sodium (Diss	40200	ug/L		250	250	1000	SW-846 6020A Dissolved	MS	11/03/14 1525
Thallium (Dis	43.2	ug/L		0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1532
Titanium (Dis	49.5	ug/L		0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1532
Vanadium (D	83.7	ug/L		0.25	0.25	1.00	SW-846 6020A Dissolved	MS	11/03/14 1532
Zinc (Dissolv	963	ug/L		5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/03/14 1532

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: MA02MW001D

Lab Code: LA024 | Case No.: | Contract:

Matrix: (soil / water) Water | SAS No.: | SDG No.: 214102205

Level: (low / med) | % Solids: | Lab Sample ID: 21410220520

Date Received: 10/24/14 | Time: 0935 | Date Collected: 10/23/14 | Time: 1143

Analyte	Conc.	Units	C	MDL	LOD	LOQ	Method	Type	Analyzed
Aluminum	100	ug/L	U	100	100	400	SW-846 6020A	MS	10/30/14 0532
Antimony	10.0	ug/L	U	10.0	10.0	40.0	SW-846 6020A	MS	10/30/14 0532
Arsenic	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	10/30/14 0532
Barium	7.67	ug/L	J	5.00	5.00	20.0	SW-846 6020A	MS	10/30/14 0532
Beryllium	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	10/31/14 0921
Cadmium	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	10/30/14 0532
Calcium	132000	ug/L		2500	2500	10000	SW-846 6020A	MS	10/30/14 0532
Chromium	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	10/30/14 0532
Cobalt	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	10/30/14 0532
Copper	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	10/30/14 0532
Iron	500	ug/L	U	500	500	2000	SW-846 6020A	MS	10/30/14 0532
Lead	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	10/30/14 0532
Magnesium	50000	ug/L		500	500	2000	SW-846 6020A	MS	10/30/14 0532
Manganese	180	ug/L		25.0	25.0	100	SW-846 6020A	MS	10/30/14 0532
Mercury	0.14399	ug/L	J	0.070	0.070	0.20	SW-846 7470A	AV	10/28/14 1340
Molybdenum	16.8	ug/L	J	5.00	5.00	20.0	SW-846 6020A	MS	10/30/14 0532
Nickel	10.0	ug/L	U	10.0	10.0	40.0	SW-846 6020A	MS	10/30/14 0532
Potassium	6260	ug/L		500	500	2000	SW-846 6020A	MS	10/30/14 0532
Selenium	33.7	ug/L		5.00	5.00	20.0	SW-846 6020A	MS	10/30/14 0532
Silver	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	10/30/14 0532
Sodium	2030000	ug/L		12500	12500	50000	SW-846 6020A	MS	10/30/14 0525
Thallium	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	10/30/14 0532
Titanium	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	10/30/14 0532
Vanadium	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A	MS	10/30/14 0532
Zinc	100	ug/L	U	100	100	400	SW-846 6020A	MS	10/30/14 0532

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: MA02MW001D

Lab Code: LA024 | Case No.: | Contract:

Matrix: (soil / water) Water | SAS No.: | SDG No.: 214102205

Level: (low / med) | % Solids: | Lab Sample ID: 21410220520

Date Received: 10/24/14 | Time: 0935 | Date Collected: 10/23/14 | Time: 1143

Analyte	Conc.	Units	C	MDL	LOD	LOQ	Method	Type	Analyzed
Aluminum (D	100	ug/L	U	100	100	400	SW-846 6020A Dissolved	MS	11/03/14 1602
Antimony (Di	10.0	ug/L	U	10.0	10.0	40.0	SW-846 6020A Dissolved	MS	11/03/14 1602
Arsenic (Diss	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/03/14 1602
Barium (Diss	8.94	ug/L	J	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/03/14 1602
Beryllium (Di	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/03/14 1602
Cadmium (Di	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/03/14 1602
Calcium (Dis	141000	ug/L		2500	2500	10000	SW-846 6020A Dissolved	MS	11/03/14 1602
Chromium (D	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/03/14 1602
Cobalt (Diss	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/03/14 1602
Copper (Diss	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/03/14 1602
Iron (Dissolv	500	ug/L	U	500	500	2000	SW-846 6020A Dissolved	MS	11/03/14 1602
Lead (Dissol	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/03/14 1602
Magnesium (	55300	ug/L		500	500	2000	SW-846 6020A Dissolved	MS	11/03/14 1602
Manganese (	190	ug/L		25.0	25.0	100	SW-846 6020A Dissolved	MS	11/03/14 1602
Mercury (Dis	0.070	ug/L	U	0.070	0.070	0.20	SW-846 7470A Dissolved	AV	10/28/14 1341
Molybdenum	18.7	ug/L	J	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/03/14 1602
Nickel (Disso	10.0	ug/L	U	10.0	10.0	40.0	SW-846 6020A Dissolved	MS	11/03/14 1602
Potassium (	7170	ug/L		500	500	2000	SW-846 6020A Dissolved	MS	11/03/14 1602
Selenium (Di	42.0	ug/L		5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/03/14 1602
Silver (Dissol	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/03/14 1602
Sodium (Diss	2110000	ug/L		12500	12500	50000	SW-846 6020A Dissolved	MS	11/03/14 1554
Thallium (Dis	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/03/14 1602
Titanium (Dis	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/03/14 1602
Vanadium (D	5.00	ug/L	U	5.00	5.00	20.0	SW-846 6020A Dissolved	MS	11/03/14 1602
Zinc (Dissolv	100	ug/L	U	100	100	400	SW-846 6020A Dissolved	MS	11/03/14 1602

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-91-1 CPI Instrument ID: ICPMS1 ICAL ID: 3

Date Analyzed: 10/29/14 Time: 1425

INITIAL CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Aluminum	1000	961	96	ug/L	SW-846 6020A	MS
Antimony	50.0	47.1	94	ug/L	SW-846 6020A	MS
Arsenic	50.0	48.3	97	ug/L	SW-846 6020A	MS
Barium	50.0	46.4	93	ug/L	SW-846 6020A	MS
Beryllium	50.0	48.7	97	ug/L	SW-846 6020A	MS
Cadmium	50.0	47.7	95	ug/L	SW-846 6020A	MS
Calcium	25000	23700	95	ug/L	SW-846 6020A	MS
Chromium	50.0	48.7	97	ug/L	SW-846 6020A	MS
Cobalt	50.0	48.9	98	ug/L	SW-846 6020A	MS
Copper	50.0	49.8	100	ug/L	SW-846 6020A	MS
Iron	5000	4860	97	ug/L	SW-846 6020A	MS
Lead	50.0	46.3	93	ug/L	SW-846 6020A	MS
Magnesium	5000	4900	98	ug/L	SW-846 6020A	MS
Manganese	50.0	49.0	98	ug/L	SW-846 6020A	MS
Molybdenum	50.0	46.8	94	ug/L	SW-846 6020A	MS
Nickel	100	97.7	98	ug/L	SW-846 6020A	MS
Potassium	5000	4700	94	ug/L	SW-846 6020A	MS
Selenium	25.0	24.3	97	ug/L	SW-846 6020A	MS
Silver	50.0	49.8	100	ug/L	SW-846 6020A	MS
Sodium	5000	4830	97	ug/L	SW-846 6020A	MS
Thallium	50.0	47.7	95	ug/L	SW-846 6020A	MS
Titanium	50.0	49.5	99	ug/L	SW-846 6020A	MS
Vanadium	50.0	47.7	95	ug/L	SW-846 6020A	MS
Zinc	1000	983	98	ug/L	SW-846 6020A	MS

ICV CONTROL LIMITS EPA 6010/6020/200.8 = 90-110 EPA 200.7 = 95-105

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-91-5 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 3

Date Analyzed: 10/29/14 Time: 1440

LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Zinc	20.0	22.0	110	ug/L	SW-846 6020A	MS
Aluminum	20.0	19.6	98	ug/L	SW-846 6020A	MS
Antimony	2.00	1.86	93	ug/L	SW-846 6020A	MS
Arsenic	1.00	1.06	106	ug/L	SW-846 6020A	MS
Barium	1.00	0.910	91	ug/L	SW-846 6020A	MS
Beryllium	1.00	0.950	95	ug/L	SW-846 6020A	MS
Cadmium	1.00	0.990	99	ug/L	SW-846 6020A	MS
Calcium	500	531	106	ug/L	SW-846 6020A	MS
Chromium	1.00	1.05	105	ug/L	SW-846 6020A	MS
Cobalt	1.00	1.05	105	ug/L	SW-846 6020A	MS
Copper	1.00	1.08	108	ug/L	SW-846 6020A	MS
Iron	100	102	102	ug/L	SW-846 6020A	MS
Lead	1.00	0.970	97	ug/L	SW-846 6020A	MS
Magnesium	100	105	105	ug/L	SW-846 6020A	MS
Manganese	5.00	5.21	104	ug/L	SW-846 6020A	MS
Molybdenum	1.00	1.01	101	ug/L	SW-846 6020A	MS
Nickel	2.00	2.16	108	ug/L	SW-846 6020A	MS
Potassium	100	101	101	ug/L	SW-846 6020A	MS
Selenium	1.00	1.00	100	ug/L	SW-846 6020A	MS
Silver	1.00	1.03	103	ug/L	SW-846 6020A	MS
Sodium	100	106	106	ug/L	SW-846 6020A	MS
Thallium	1.00	0.990	99	ug/L	SW-846 6020A	MS
Titanium	1.00	1.04	104	ug/L	SW-846 6020A	MS
Vanadium	1.00	1.02	102	ug/L	SW-846 6020A	MS

LLCCV CONTROL LIMITS EPA 6020A/EPA 200.8 = 70-130

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-91-5 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 3

Date Analyzed: 10/30/14 Time: 0257

LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Aluminum	20.0	18.7	93	ug/L	SW-846 6020A	MS
Antimony	2.00	1.71	86	ug/L	SW-846 6020A	MS
Arsenic	1.00	0.960	96	ug/L	SW-846 6020A	MS
Barium	1.00	0.970	97	ug/L	SW-846 6020A	MS
Beryllium	1.00	0.880	88	ug/L	SW-846 6020A	MS
Cadmium	1.00	0.940	94	ug/L	SW-846 6020A	MS
Calcium	500	511	102	ug/L	SW-846 6020A	MS
Chromium	1.00	0.970	97	ug/L	SW-846 6020A	MS
Cobalt	1.00	1.01	101	ug/L	SW-846 6020A	MS
Copper	1.00	1.02	102	ug/L	SW-846 6020A	MS
Iron	100	97.8	98	ug/L	SW-846 6020A	MS
Lead	1.00	0.920	92	ug/L	SW-846 6020A	MS
Magnesium	100	99.0	99	ug/L	SW-846 6020A	MS
Manganese	5.00	4.93	99	ug/L	SW-846 6020A	MS
Molybdenum	1.00	0.920	92	ug/L	SW-846 6020A	MS
Nickel	2.00	1.95	98	ug/L	SW-846 6020A	MS
Potassium	100	96.1	96	ug/L	SW-846 6020A	MS
Selenium	1.00	0.950	95	ug/L	SW-846 6020A	MS
Silver	1.00	0.980	98	ug/L	SW-846 6020A	MS
Thallium	1.00	0.940	94	ug/L	SW-846 6020A	MS
Titanium	1.00	0.540	54	ug/L	SW-846 6020A	MS
Vanadium	1.00	0.950	95	ug/L	SW-846 6020A	MS
Zinc	20.0	20.8	104	ug/L	SW-846 6020A	MS

LLCCV CONTROL LIMITS EPA 6020A/EPA 200.8 = 70-130

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-91-5 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 3

Date Analyzed: 10/30/14 Time: 0304

CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	200	190	95	ug/L	SW-846 6020A	MS
Antimony	20.0	18.4	92	ug/L	SW-846 6020A	MS
Arsenic	10.0	9.58	96	ug/L	SW-846 6020A	MS
Barium	10.0	9.47	95	ug/L	SW-846 6020A	MS
Beryllium	10.0	8.65	86	ug/L	SW-846 6020A	MS
Cadmium	10.0	9.52	95	ug/L	SW-846 6020A	MS
Calcium	5000	4840	97	ug/L	SW-846 6020A	MS
Chromium	10.0	9.58	96	ug/L	SW-846 6020A	MS
Cobalt	10.0	9.66	97	ug/L	SW-846 6020A	MS
Copper	10.0	9.70	97	ug/L	SW-846 6020A	MS
Iron	1000	956	96	ug/L	SW-846 6020A	MS
Lead	10.0	9.18	92	ug/L	SW-846 6020A	MS
Magnesium	1000	953	95	ug/L	SW-846 6020A	MS
Manganese	50.0	48.1	96	ug/L	SW-846 6020A	MS
Molybdenum	10.0	9.29	93	ug/L	SW-846 6020A	MS
Nickel	20.0	19.3	97	ug/L	SW-846 6020A	MS
Potassium	1000	945	95	ug/L	SW-846 6020A	MS
Selenium	10.0	9.39	94	ug/L	SW-846 6020A	MS
Silver	10.0	9.78	98	ug/L	SW-846 6020A	MS
Thallium	10.0	9.56	96	ug/L	SW-846 6020A	MS
Titanium	10.0	9.08	91	ug/L	SW-846 6020A	MS
Vanadium	10.0	9.57	96	ug/L	SW-846 6020A	MS
Zinc	200	196	98	ug/L	SW-846 6020A	MS

CCV CONTROL LIMITS EPA 6010/6020A/200.7/200.8 = 90-110, EPA 7470/7471/7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-91-5 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 3

Date Analyzed: 10/30/14 Time: 0433

LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Aluminum	20.0	19.6	98	ug/L	SW-846 6020A	MS
Antimony	2.00	1.75	88	ug/L	SW-846 6020A	MS
Arsenic	1.00	0.970	97	ug/L	SW-846 6020A	MS
Barium	1.00	0.960	96	ug/L	SW-846 6020A	MS
Beryllium	1.00	0.950	95	ug/L	SW-846 6020A	MS
Cadmium	1.00	0.940	94	ug/L	SW-846 6020A	MS
Calcium	500	498	100	ug/L	SW-846 6020A	MS
Chromium	1.00	1.00	100	ug/L	SW-846 6020A	MS
Cobalt	1.00	1.03	103	ug/L	SW-846 6020A	MS
Copper	1.00	1.01	101	ug/L	SW-846 6020A	MS
Iron	100	101	101	ug/L	SW-846 6020A	MS
Lead	1.00	0.930	93	ug/L	SW-846 6020A	MS
Magnesium	100	96.1	96	ug/L	SW-846 6020A	MS
Manganese	5.00	5.00	100	ug/L	SW-846 6020A	MS
Molybdenum	1.00	0.920	92	ug/L	SW-846 6020A	MS
Nickel	2.00	2.03	101	ug/L	SW-846 6020A	MS
Potassium	100	91.1	91	ug/L	SW-846 6020A	MS
Selenium	1.00	0.940	94	ug/L	SW-846 6020A	MS
Silver	1.00	0.990	99	ug/L	SW-846 6020A	MS
Sodium	100	120	120	ug/L	SW-846 6020A	MS
Thallium	1.00	1.02	102	ug/L	SW-846 6020A	MS
Titanium	1.00	1.30	130	ug/L	SW-846 6020A	MS
Vanadium	1.00	0.960	96	ug/L	SW-846 6020A	MS
Zinc	20.0	21.9	110	ug/L	SW-846 6020A	MS

LLCCV CONTROL LIMITS EPA 6020A/EPA 200.8 = 70-130

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-91-5 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 3

Date Analyzed: 10/30/14 Time: 0440

CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	200	184	92	ug/L	SW-846 6020A	MS
Antimony	20.0	18.3	91	ug/L	SW-846 6020A	MS
Arsenic	10.0	9.78	98	ug/L	SW-846 6020A	MS
Barium	10.0	9.38	94	ug/L	SW-846 6020A	MS
Beryllium	10.0	9.10	91	ug/L	SW-846 6020A	MS
Cadmium	10.0	9.46	95	ug/L	SW-846 6020A	MS
Calcium	5000	4780	96	ug/L	SW-846 6020A	MS
Chromium	10.0	9.75	98	ug/L	SW-846 6020A	MS
Cobalt	10.0	9.97	100	ug/L	SW-846 6020A	MS
Copper	10.0	9.98	100	ug/L	SW-846 6020A	MS
Iron	1000	971	97	ug/L	SW-846 6020A	MS
Lead	10.0	9.28	93	ug/L	SW-846 6020A	MS
Magnesium	1000	942	94	ug/L	SW-846 6020A	MS
Manganese	50.0	48.3	97	ug/L	SW-846 6020A	MS
Molybdenum	10.0	9.37	94	ug/L	SW-846 6020A	MS
Nickel	20.0	19.8	99	ug/L	SW-846 6020A	MS
Potassium	1000	944	94	ug/L	SW-846 6020A	MS
Selenium	10.0	9.05	90	ug/L	SW-846 6020A	MS
Silver	10.0	9.70	97	ug/L	SW-846 6020A	MS
Sodium	1000	982	98	ug/L	SW-846 6020A	MS
Thallium	10.0	9.80	98	ug/L	SW-846 6020A	MS
Titanium	10.0	8.99	90	ug/L	SW-846 6020A	MS
Vanadium	10.0	9.77	98	ug/L	SW-846 6020A	MS
Zinc	200	200	100	ug/L	SW-846 6020A	MS

CCV CONTROL LIMITS EPA 6010/6020A/200.7/200.8 = 90-110, EPA 7470/7471/7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-91-5 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 3

Date Analyzed: 10/30/14 Time: 0609

LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Aluminum	20.0	18.5	93	ug/L	SW-846 6020A	MS
Antimony	2.00	1.70	85	ug/L	SW-846 6020A	MS
Arsenic	1.00	0.970	97	ug/L	SW-846 6020A	MS
Barium	1.00	0.970	97	ug/L	SW-846 6020A	MS
Beryllium	1.00	0.850	85	ug/L	SW-846 6020A	MS
Cadmium	1.00	0.950	95	ug/L	SW-846 6020A	MS
Calcium	500	503	101	ug/L	SW-846 6020A	MS
Chromium	1.00	0.990	99	ug/L	SW-846 6020A	MS
Cobalt	1.00	1.06	106	ug/L	SW-846 6020A	MS
Copper	1.00	1.07	107	ug/L	SW-846 6020A	MS
Iron	100	102	102	ug/L	SW-846 6020A	MS
Lead	1.00	0.910	91	ug/L	SW-846 6020A	MS
Magnesium	100	93.9	94	ug/L	SW-846 6020A	MS
Manganese	5.00	5.00	100	ug/L	SW-846 6020A	MS
Molybdenum	1.00	0.890	89	ug/L	SW-846 6020A	MS
Nickel	2.00	2.07	103	ug/L	SW-846 6020A	MS
Potassium	100	90.7	91	ug/L	SW-846 6020A	MS
Selenium	1.00	0.870	87	ug/L	SW-846 6020A	MS
Silver	1.00	0.990	99	ug/L	SW-846 6020A	MS
Sodium	100	109	109	ug/L	SW-846 6020A	MS
Thallium	1.00	0.970	97	ug/L	SW-846 6020A	MS
Titanium	1.00	1.20	120	ug/L	SW-846 6020A	MS
Vanadium	1.00	0.950	95	ug/L	SW-846 6020A	MS
Zinc	20.0	22.2	111	ug/L	SW-846 6020A	MS

LLCCV CONTROL LIMITS EPA 6020A/EPA 200.8 = 70-130

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-91-5 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 3

Date Analyzed: 10/30/14 Time: 0617

CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	200	179	90	ug/L	SW-846 6020A	MS
Antimony	20.0	18.4	92	ug/L	SW-846 6020A	MS
Arsenic	10.0	10.0	100	ug/L	SW-846 6020A	MS
Barium	10.0	9.41	94	ug/L	SW-846 6020A	MS
Beryllium	10.0	8.45	84	ug/L	SW-846 6020A	MS
Cadmium	10.0	9.43	94	ug/L	SW-846 6020A	MS
Calcium	5000	4840	97	ug/L	SW-846 6020A	MS
Chromium	10.0	9.87	99	ug/L	SW-846 6020A	MS
Cobalt	10.0	10.1	101	ug/L	SW-846 6020A	MS
Copper	10.0	10.1	101	ug/L	SW-846 6020A	MS
Iron	1000	993	99	ug/L	SW-846 6020A	MS
Lead	10.0	9.17	92	ug/L	SW-846 6020A	MS
Magnesium	1000	927	93	ug/L	SW-846 6020A	MS
Manganese	50.0	49.3	99	ug/L	SW-846 6020A	MS
Molybdenum	10.0	9.32	93	ug/L	SW-846 6020A	MS
Nickel	20.0	20.1	101	ug/L	SW-846 6020A	MS
Potassium	1000	932	93	ug/L	SW-846 6020A	MS
Selenium	10.0	9.15	91	ug/L	SW-846 6020A	MS
Silver	10.0	9.93	99	ug/L	SW-846 6020A	MS
Sodium	1000	964	96	ug/L	SW-846 6020A	MS
Thallium	10.0	9.84	98	ug/L	SW-846 6020A	MS
Titanium	10.0	9.55	96	ug/L	SW-846 6020A	MS
Vanadium	10.0	9.73	97	ug/L	SW-846 6020A	MS
Zinc	200	205	102	ug/L	SW-846 6020A	MS

CCV CONTROL LIMITS EPA 6010/6020A/200.7/200.8 = 90-110, EPA 7470/7471/7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-91-1 CPI Instrument ID: ICPMS1 ICAL ID: 4

Date Analyzed: 10/30/14 Time: 1311

INITIAL CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	1000	909	91	ug/L	SW-846 6020A	MS
Antimony	50.0	46.5	93	ug/L	SW-846 6020A	MS
Arsenic	50.0	46.3	93	ug/L	SW-846 6020A	MS
Barium	50.0	45.5	91	ug/L	SW-846 6020A	MS
Beryllium	50.0	47.4	95	ug/L	SW-846 6020A	MS
Cadmium	50.0	46.1	92	ug/L	SW-846 6020A	MS
Calcium	25000	22900	92	ug/L	SW-846 6020A	MS
Chromium	50.0	46.2	92	ug/L	SW-846 6020A	MS
Cobalt	50.0	45.9	92	ug/L	SW-846 6020A	MS
Copper	50.0	47.2	94	ug/L	SW-846 6020A	MS
Iron	5000	4650	93	ug/L	SW-846 6020A	MS
Lead	50.0	45.5	91	ug/L	SW-846 6020A	MS
Magnesium	5000	4570	91	ug/L	SW-846 6020A	MS
Manganese	50.0	48.6	97	ug/L	SW-846 6020A	MS
Molybdenum	50.0	44.9	90	ug/L	SW-846 6020A	MS
Nickel	100	93.0	93	ug/L	SW-846 6020A	MS
Potassium	5000	4510	90	ug/L	SW-846 6020A	MS
Selenium	25.0	23.8	95	ug/L	SW-846 6020A	MS
Silver	50.0	48.4	97	ug/L	SW-846 6020A	MS
Sodium	5000	4570	91	ug/L	SW-846 6020A	MS
Thallium	50.0	46.1	92	ug/L	SW-846 6020A	MS
Titanium	50.0	46.1	92	ug/L	SW-846 6020A	MS
Vanadium	50.0	45.4	91	ug/L	SW-846 6020A	MS
Zinc	1000	941	94	ug/L	SW-846 6020A	MS

ICV CONTROL LIMITS EPA 6010/6020/200.8 = 90-110 EPA 200.7 = 95-105

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-91-5 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 4

Date Analyzed: 10/30/14 Time: 1326

LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	20.0	19.3	97	ug/L	SW-846 6020A	MS
Antimony	2.00	1.85	93	ug/L	SW-846 6020A	MS
Arsenic	1.00	1.03	103	ug/L	SW-846 6020A	MS
Barium	1.00	0.920	92	ug/L	SW-846 6020A	MS
Beryllium	1.00	0.920	92	ug/L	SW-846 6020A	MS
Cadmium	1.00	0.990	99	ug/L	SW-846 6020A	MS
Calcium	500	529	106	ug/L	SW-846 6020A	MS
Chromium	1.00	1.01	101	ug/L	SW-846 6020A	MS
Cobalt	1.00	1.03	103	ug/L	SW-846 6020A	MS
Copper	1.00	0.970	97	ug/L	SW-846 6020A	MS
Iron	100	103	103	ug/L	SW-846 6020A	MS
Lead	1.00	0.990	99	ug/L	SW-846 6020A	MS
Magnesium	100	101	101	ug/L	SW-846 6020A	MS
Manganese	5.00	5.17	103	ug/L	SW-846 6020A	MS
Molybdenum	1.00	0.970	97	ug/L	SW-846 6020A	MS
Nickel	2.00	2.12	106	ug/L	SW-846 6020A	MS
Potassium	100	100	100	ug/L	SW-846 6020A	MS
Selenium	1.00	0.840	84	ug/L	SW-846 6020A	MS
Silver	1.00	1.00	100	ug/L	SW-846 6020A	MS
Sodium	100	101	101	ug/L	SW-846 6020A	MS
Thallium	1.00	0.980	98	ug/L	SW-846 6020A	MS
Titanium	1.00	0.930	93	ug/L	SW-846 6020A	MS
Vanadium	1.00	1.00	100	ug/L	SW-846 6020A	MS
Zinc	20.0	21.4	107	ug/L	SW-846 6020A	MS

LLCCV CONTROL LIMITS EPA 6020A/EPA 200.8 = 70-130

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-91-5 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 4

Date Analyzed: 10/30/14 Time: 2259

LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	20.0	19.6	98	ug/L	SW-846 6020A	MS
Antimony	2.00	1.86	93	ug/L	SW-846 6020A	MS
Arsenic	1.00	1.01	101	ug/L	SW-846 6020A	MS
Barium	1.00	0.970	97	ug/L	SW-846 6020A	MS
Beryllium	1.00	0.980	98	ug/L	SW-846 6020A	MS
Cadmium	1.00	0.980	98	ug/L	SW-846 6020A	MS
Calcium	500	526	105	ug/L	SW-846 6020A	MS
Chromium	1.00	1.00	100	ug/L	SW-846 6020A	MS
Cobalt	1.00	1.02	102	ug/L	SW-846 6020A	MS
Copper	1.00	1.04	104	ug/L	SW-846 6020A	MS
Iron	100	100	100	ug/L	SW-846 6020A	MS
Lead	1.00	0.960	96	ug/L	SW-846 6020A	MS
Magnesium	100	98.9	99	ug/L	SW-846 6020A	MS
Manganese	5.00	5.17	103	ug/L	SW-846 6020A	MS
Molybdenum	1.00	0.930	93	ug/L	SW-846 6020A	MS
Nickel	2.00	2.10	105	ug/L	SW-846 6020A	MS
Potassium	100	98.4	98	ug/L	SW-846 6020A	MS
Selenium	1.00	0.940	94	ug/L	SW-846 6020A	MS
Silver	1.00	0.990	99	ug/L	SW-846 6020A	MS
Sodium	100	172	172	ug/L	SW-846 6020A	MS
Thallium	1.00	0.970	97	ug/L	SW-846 6020A	MS
Titanium	1.00	1.14	114	ug/L	SW-846 6020A	MS
Vanadium	1.00	0.990	99	ug/L	SW-846 6020A	MS
Zinc	20.0	21.1	106	ug/L	SW-846 6020A	MS

LLCCV CONTROL LIMITS EPA 6020A/EPA 200.8 = 70-130

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-91-5 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 4

Date Analyzed: 10/30/14 Time: 2306

CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Vanadium	10.0	9.86	99	ug/L	SW-846 6020A	MS
Zinc	200	207	104	ug/L	SW-846 6020A	MS
Aluminum	200	196	98	ug/L	SW-846 6020A	MS
Antimony	20.0	18.8	94	ug/L	SW-846 6020A	MS
Arsenic	10.0	10.0	100	ug/L	SW-846 6020A	MS
Barium	10.0	9.79	98	ug/L	SW-846 6020A	MS
Beryllium	10.0	9.29	93	ug/L	SW-846 6020A	MS
Cadmium	10.0	9.64	96	ug/L	SW-846 6020A	MS
Calcium	5000	4960	99	ug/L	SW-846 6020A	MS
Chromium	10.0	9.93	99	ug/L	SW-846 6020A	MS
Cobalt	10.0	10.1	101	ug/L	SW-846 6020A	MS
Copper	10.0	10.3	103	ug/L	SW-846 6020A	MS
Iron	1000	1000	100	ug/L	SW-846 6020A	MS
Lead	10.0	9.64	96	ug/L	SW-846 6020A	MS
Magnesium	1000	975	98	ug/L	SW-846 6020A	MS
Manganese	50.0	50.3	101	ug/L	SW-846 6020A	MS
Molybdenum	10.0	9.39	94	ug/L	SW-846 6020A	MS
Nickel	20.0	20.5	102	ug/L	SW-846 6020A	MS
Potassium	1000	962	96	ug/L	SW-846 6020A	MS
Selenium	10.0	9.70	97	ug/L	SW-846 6020A	MS
Silver	10.0	9.83	98	ug/L	SW-846 6020A	MS
Sodium	1000	1040	104	ug/L	SW-846 6020A	MS
Thallium	10.0	9.92	99	ug/L	SW-846 6020A	MS
Titanium	10.0	10.3	103	ug/L	SW-846 6020A	MS

CCV CONTROL LIMITS EPA 6010/6020A/200.7/200.8 = 90-110, EPA 7470/7471/7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-92-2 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 4

Date Analyzed: 10/31/14 Time: 0035

LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	20.0	19.4	97	ug/L	SW-846 6020A	MS
Antimony	2.00	1.86	93	ug/L	SW-846 6020A	MS
Arsenic	1.00	1.03	103	ug/L	SW-846 6020A	MS
Barium	1.00	1.07	107	ug/L	SW-846 6020A	MS
Beryllium	1.00	1.06	106	ug/L	SW-846 6020A	MS
Cadmium	1.00	0.990	99	ug/L	SW-846 6020A	MS
Calcium	500	532	106	ug/L	SW-846 6020A	MS
Chromium	1.00	1.00	100	ug/L	SW-846 6020A	MS
Cobalt	1.00	1.01	101	ug/L	SW-846 6020A	MS
Copper	1.00	1.06	106	ug/L	SW-846 6020A	MS
Iron	100	102	102	ug/L	SW-846 6020A	MS
Lead	1.00	0.980	98	ug/L	SW-846 6020A	MS
Magnesium	100	98.7	99	ug/L	SW-846 6020A	MS
Manganese	5.00	5.15	103	ug/L	SW-846 6020A	MS
Molybdenum	1.00	0.930	93	ug/L	SW-846 6020A	MS
Nickel	2.00	2.11	106	ug/L	SW-846 6020A	MS
Potassium	100	102	102	ug/L	SW-846 6020A	MS
Selenium	1.00	0.940	94	ug/L	SW-846 6020A	MS
Silver	1.00	0.980	98	ug/L	SW-846 6020A	MS
Sodium	100	144	144	ug/L	SW-846 6020A	MS
Thallium	1.00	0.950	95	ug/L	SW-846 6020A	MS
Titanium	1.00	1.14	114	ug/L	SW-846 6020A	MS
Vanadium	1.00	1.00	100	ug/L	SW-846 6020A	MS
Zinc	20.0	21.3	107	ug/L	SW-846 6020A	MS

LLCCV CONTROL LIMITS EPA 6020A/EPA 200.8 = 70-130

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-92-2 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 4

Date Analyzed: 10/31/14 Time: 0043

CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	200	196	98	ug/L	SW-846 6020A	MS
Antimony	20.0	19.8	99	ug/L	SW-846 6020A	MS
Arsenic	10.0	10.4	104	ug/L	SW-846 6020A	MS
Barium	10.0	10.1	101	ug/L	SW-846 6020A	MS
Beryllium	10.0	9.44	94	ug/L	SW-846 6020A	MS
Cadmium	10.0	10.0	100	ug/L	SW-846 6020A	MS
Calcium	5000	4990	100	ug/L	SW-846 6020A	MS
Chromium	10.0	10.0	100	ug/L	SW-846 6020A	MS
Cobalt	10.0	10.2	102	ug/L	SW-846 6020A	MS
Copper	10.0	10.3	103	ug/L	SW-846 6020A	MS
Iron	1000	1010	101	ug/L	SW-846 6020A	MS
Lead	10.0	9.83	98	ug/L	SW-846 6020A	MS
Magnesium	1000	963	96	ug/L	SW-846 6020A	MS
Manganese	50.0	50.7	101	ug/L	SW-846 6020A	MS
Molybdenum	10.0	9.54	95	ug/L	SW-846 6020A	MS
Nickel	20.0	20.5	103	ug/L	SW-846 6020A	MS
Potassium	1000	964	96	ug/L	SW-846 6020A	MS
Selenium	10.0	9.73	97	ug/L	SW-846 6020A	MS
Silver	10.0	9.86	99	ug/L	SW-846 6020A	MS
Sodium	1000	1010	101	ug/L	SW-846 6020A	MS
Thallium	10.0	9.99	100	ug/L	SW-846 6020A	MS
Titanium	10.0	10.4	104	ug/L	SW-846 6020A	MS
Vanadium	10.0	9.89	99	ug/L	SW-846 6020A	MS
Zinc	200	209	104	ug/L	SW-846 6020A	MS

CCV CONTROL LIMITS EPA 6010/6020A/200.7/200.8 = 90-110, EPA 7470/7471/7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-92-2 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 4

Date Analyzed: 10/31/14 Time: 0211

LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	20.0	19.9	100	ug/L	SW-846 6020A	MS
Antimony	2.00	1.87	93	ug/L	SW-846 6020A	MS
Arsenic	1.00	1.04	104	ug/L	SW-846 6020A	MS
Barium	1.00	1.00	100	ug/L	SW-846 6020A	MS
Beryllium	1.00	0.880	88	ug/L	SW-846 6020A	MS
Cadmium	1.00	0.970	97	ug/L	SW-846 6020A	MS
Calcium	500	525	105	ug/L	SW-846 6020A	MS
Chromium	1.00	1.01	101	ug/L	SW-846 6020A	MS
Cobalt	1.00	1.08	108	ug/L	SW-846 6020A	MS
Copper	1.00	1.12	112	ug/L	SW-846 6020A	MS
Iron	100	103	103	ug/L	SW-846 6020A	MS
Lead	1.00	0.970	97	ug/L	SW-846 6020A	MS
Magnesium	100	97.0	97	ug/L	SW-846 6020A	MS
Manganese	5.00	5.16	103	ug/L	SW-846 6020A	MS
Molybdenum	1.00	0.910	91	ug/L	SW-846 6020A	MS
Nickel	2.00	2.11	106	ug/L	SW-846 6020A	MS
Potassium	100	96.7	97	ug/L	SW-846 6020A	MS
Selenium	1.00	0.920	92	ug/L	SW-846 6020A	MS
Silver	1.00	0.980	98	ug/L	SW-846 6020A	MS
Sodium	100	132	132	ug/L	SW-846 6020A	MS
Thallium	1.00	0.960	96	ug/L	SW-846 6020A	MS
Titanium	1.00	1.29	129	ug/L	SW-846 6020A	MS
Vanadium	1.00	1.00	100	ug/L	SW-846 6020A	MS
Zinc	20.0	21.1	105	ug/L	SW-846 6020A	MS

LLCCV CONTROL LIMITS EPA 6020A/EPA 200.8 = 70-130

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-92-2 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 4

Date Analyzed: 10/31/14 Time: 0219

CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	200	197	98	ug/L	SW-846 6020A	MS
Antimony	20.0	19.1	96	ug/L	SW-846 6020A	MS
Arsenic	10.0	10.4	104	ug/L	SW-846 6020A	MS
Barium	10.0	9.80	98	ug/L	SW-846 6020A	MS
Beryllium	10.0	9.71	97	ug/L	SW-846 6020A	MS
Cadmium	10.0	9.72	97	ug/L	SW-846 6020A	MS
Calcium	5000	5040	101	ug/L	SW-846 6020A	MS
Chromium	10.0	10.3	103	ug/L	SW-846 6020A	MS
Cobalt	10.0	10.5	105	ug/L	SW-846 6020A	MS
Copper	10.0	10.5	105	ug/L	SW-846 6020A	MS
Iron	1000	1010	101	ug/L	SW-846 6020A	MS
Lead	10.0	9.85	98	ug/L	SW-846 6020A	MS
Magnesium	1000	986	99	ug/L	SW-846 6020A	MS
Manganese	50.0	51.2	102	ug/L	SW-846 6020A	MS
Molybdenum	10.0	9.70	97	ug/L	SW-846 6020A	MS
Nickel	20.0	21.1	105	ug/L	SW-846 6020A	MS
Potassium	1000	982	98	ug/L	SW-846 6020A	MS
Selenium	10.0	9.67	97	ug/L	SW-846 6020A	MS
Silver	10.0	10.1	101	ug/L	SW-846 6020A	MS
Sodium	1000	1030	103	ug/L	SW-846 6020A	MS
Thallium	10.0	10.1	101	ug/L	SW-846 6020A	MS
Titanium	10.0	10.0	100	ug/L	SW-846 6020A	MS
Vanadium	10.0	10.0	100	ug/L	SW-846 6020A	MS
Zinc	200	213	106	ug/L	SW-846 6020A	MS

CCV CONTROL LIMITS EPA 6010/6020A/200.7/200.8 = 90-110, EPA 7470/7471/7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-92-2 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 4

Date Analyzed: 10/31/14 Time: 0348

LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Aluminum	20.0	19.5	97	ug/L	SW-846 6020A	MS
Antimony	2.00	1.90	95	ug/L	SW-846 6020A	MS
Arsenic	1.00	1.01	101	ug/L	SW-846 6020A	MS
Barium	1.00	0.980	98	ug/L	SW-846 6020A	MS
Beryllium	1.00	0.920	92	ug/L	SW-846 6020A	MS
Cadmium	1.00	0.960	96	ug/L	SW-846 6020A	MS
Calcium	500	530	106	ug/L	SW-846 6020A	MS
Chromium	1.00	0.990	99	ug/L	SW-846 6020A	MS
Cobalt	1.00	1.03	103	ug/L	SW-846 6020A	MS
Copper	1.00	1.06	106	ug/L	SW-846 6020A	MS
Iron	100	99.4	99	ug/L	SW-846 6020A	MS
Lead	1.00	0.940	94	ug/L	SW-846 6020A	MS
Magnesium	100	96.4	96	ug/L	SW-846 6020A	MS
Manganese	5.00	5.03	101	ug/L	SW-846 6020A	MS
Molybdenum	1.00	0.940	94	ug/L	SW-846 6020A	MS
Nickel	2.00	2.13	107	ug/L	SW-846 6020A	MS
Potassium	100	99.2	99	ug/L	SW-846 6020A	MS
Selenium	1.00	0.980	98	ug/L	SW-846 6020A	MS
Silver	1.00	1.00	100	ug/L	SW-846 6020A	MS
Sodium	100	146	146	ug/L	SW-846 6020A	MS
Thallium	1.00	0.930	93	ug/L	SW-846 6020A	MS
Titanium	1.00	1.00	100	ug/L	SW-846 6020A	MS
Vanadium	1.00	0.980	98	ug/L	SW-846 6020A	MS
Zinc	20.0	21.2	106	ug/L	SW-846 6020A	MS

LLCCV CONTROL LIMITS EPA 6020A/EPA 200.8 = 70-130

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-92-2 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 4

Date Analyzed: 10/31/14 Time: 0355

CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	200	197	98	ug/L	SW-846 6020A	MS
Antimony	20.0	19.2	96	ug/L	SW-846 6020A	MS
Arsenic	10.0	10.4	104	ug/L	SW-846 6020A	MS
Barium	10.0	9.80	98	ug/L	SW-846 6020A	MS
Beryllium	10.0	9.73	97	ug/L	SW-846 6020A	MS
Cadmium	10.0	9.83	98	ug/L	SW-846 6020A	MS
Calcium	5000	5070	101	ug/L	SW-846 6020A	MS
Chromium	10.0	10.3	103	ug/L	SW-846 6020A	MS
Cobalt	10.0	10.5	105	ug/L	SW-846 6020A	MS
Copper	10.0	10.6	106	ug/L	SW-846 6020A	MS
Iron	1000	1040	104	ug/L	SW-846 6020A	MS
Lead	10.0	9.88	99	ug/L	SW-846 6020A	MS
Magnesium	1000	982	98	ug/L	SW-846 6020A	MS
Manganese	50.0	51.2	102	ug/L	SW-846 6020A	MS
Molybdenum	10.0	9.72	97	ug/L	SW-846 6020A	MS
Nickel	20.0	21.2	106	ug/L	SW-846 6020A	MS
Potassium	1000	982	98	ug/L	SW-846 6020A	MS
Selenium	10.0	9.87	99	ug/L	SW-846 6020A	MS
Silver	10.0	10.2	102	ug/L	SW-846 6020A	MS
Sodium	1000	1030	103	ug/L	SW-846 6020A	MS
Thallium	10.0	10.3	103	ug/L	SW-846 6020A	MS
Titanium	10.0	9.50	95	ug/L	SW-846 6020A	MS
Vanadium	10.0	10.2	102	ug/L	SW-846 6020A	MS
Zinc	200	212	106	ug/L	SW-846 6020A	MS

CCV CONTROL LIMITS EPA 6010/6020A/200.7/200.8 = 90-110, EPA 7470/7471/7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-92-2 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 4

Date Analyzed: 10/31/14 Time: 0524

LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Aluminum	20.0	18.8	94	ug/L	SW-846 6020A	MS
Antimony	2.00	1.79	89	ug/L	SW-846 6020A	MS
Arsenic	1.00	1.04	104	ug/L	SW-846 6020A	MS
Barium	1.00	0.930	93	ug/L	SW-846 6020A	MS
Beryllium	1.00	0.880	88	ug/L	SW-846 6020A	MS
Cadmium	1.00	0.970	97	ug/L	SW-846 6020A	MS
Calcium	500	518	104	ug/L	SW-846 6020A	MS
Chromium	1.00	1.02	102	ug/L	SW-846 6020A	MS
Cobalt	1.00	1.00	100	ug/L	SW-846 6020A	MS
Copper	1.00	1.03	103	ug/L	SW-846 6020A	MS
Iron	100	104	104	ug/L	SW-846 6020A	MS
Lead	1.00	0.970	97	ug/L	SW-846 6020A	MS
Magnesium	100	96.7	97	ug/L	SW-846 6020A	MS
Manganese	5.00	5.11	102	ug/L	SW-846 6020A	MS
Molybdenum	1.00	0.910	91	ug/L	SW-846 6020A	MS
Nickel	2.00	2.14	107	ug/L	SW-846 6020A	MS
Potassium	100	99.1	99	ug/L	SW-846 6020A	MS
Selenium	1.00	0.900	90	ug/L	SW-846 6020A	MS
Silver	1.00	0.980	98	ug/L	SW-846 6020A	MS
Sodium	100	121	121	ug/L	SW-846 6020A	MS
Thallium	1.00	0.950	95	ug/L	SW-846 6020A	MS
Titanium	1.00	0.780	78	ug/L	SW-846 6020A	MS
Vanadium	1.00	1.01	101	ug/L	SW-846 6020A	MS
Zinc	20.0	21.4	107	ug/L	SW-846 6020A	MS

LLCCV CONTROL LIMITS EPA 6020A/EPA 200.8 = 70-130

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-92-2 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 4

Date Analyzed: 10/31/14 Time: 0532

CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	200	190	95	ug/L	SW-846 6020A	MS
Antimony	20.0	18.7	94	ug/L	SW-846 6020A	MS
Arsenic	10.0	10.3	103	ug/L	SW-846 6020A	MS
Barium	10.0	9.55	95	ug/L	SW-846 6020A	MS
Beryllium	10.0	9.54	95	ug/L	SW-846 6020A	MS
Cadmium	10.0	9.52	95	ug/L	SW-846 6020A	MS
Calcium	5000	4940	99	ug/L	SW-846 6020A	MS
Chromium	10.0	10.2	102	ug/L	SW-846 6020A	MS
Cobalt	10.0	10.3	103	ug/L	SW-846 6020A	MS
Copper	10.0	10.4	104	ug/L	SW-846 6020A	MS
Iron	1000	1020	102	ug/L	SW-846 6020A	MS
Lead	10.0	9.76	98	ug/L	SW-846 6020A	MS
Magnesium	1000	962	96	ug/L	SW-846 6020A	MS
Manganese	50.0	50.5	101	ug/L	SW-846 6020A	MS
Molybdenum	10.0	9.56	96	ug/L	SW-846 6020A	MS
Nickel	20.0	20.8	104	ug/L	SW-846 6020A	MS
Potassium	1000	958	96	ug/L	SW-846 6020A	MS
Selenium	10.0	9.60	96	ug/L	SW-846 6020A	MS
Silver	10.0	9.99	100	ug/L	SW-846 6020A	MS
Sodium	1000	996	100	ug/L	SW-846 6020A	MS
Thallium	10.0	9.93	99	ug/L	SW-846 6020A	MS
Titanium	10.0	9.56	96	ug/L	SW-846 6020A	MS
Vanadium	10.0	10.1	101	ug/L	SW-846 6020A	MS
Zinc	200	208	104	ug/L	SW-846 6020A	MS

CCV CONTROL LIMITS EPA 6010/6020A/200.7/200.8 = 90-110, EPA 7470/7471/7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-92-2 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 4

Date Analyzed: 10/31/14 Time: 0716

LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Aluminum	20.0	18.6	93	ug/L	SW-846 6020A	MS
Antimony	2.00	1.90	95	ug/L	SW-846 6020A	MS
Arsenic	1.00	1.05	105	ug/L	SW-846 6020A	MS
Barium	1.00	0.920	92	ug/L	SW-846 6020A	MS
Beryllium	1.00	0.850	85	ug/L	SW-846 6020A	MS
Cadmium	1.00	0.950	95	ug/L	SW-846 6020A	MS
Calcium	500	506	101	ug/L	SW-846 6020A	MS
Chromium	1.00	1.03	103	ug/L	SW-846 6020A	MS
Cobalt	1.00	1.04	104	ug/L	SW-846 6020A	MS
Copper	1.00	1.04	104	ug/L	SW-846 6020A	MS
Iron	100	104	104	ug/L	SW-846 6020A	MS
Lead	1.00	0.960	96	ug/L	SW-846 6020A	MS
Magnesium	100	95.4	95	ug/L	SW-846 6020A	MS
Manganese	5.00	5.10	102	ug/L	SW-846 6020A	MS
Molybdenum	1.00	0.950	95	ug/L	SW-846 6020A	MS
Nickel	2.00	2.15	107	ug/L	SW-846 6020A	MS
Potassium	100	95.7	96	ug/L	SW-846 6020A	MS
Selenium	1.00	0.970	97	ug/L	SW-846 6020A	MS
Silver	1.00	0.990	99	ug/L	SW-846 6020A	MS
Sodium	100	109	109	ug/L	SW-846 6020A	MS
Thallium	1.00	1.01	101	ug/L	SW-846 6020A	MS
Titanium	1.00	1.00	100	ug/L	SW-846 6020A	MS
Vanadium	1.00	1.02	102	ug/L	SW-846 6020A	MS
Zinc	20.0	21.5	108	ug/L	SW-846 6020A	MS

LLCCV CONTROL LIMITS EPA 6020A/EPA 200.8 = 70-130

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-92-2 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 4

Date Analyzed: 10/31/14 Time: 0723

CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	200	189	94	ug/L	SW-846 6020A	MS
Antimony	20.0	19.0	95	ug/L	SW-846 6020A	MS
Arsenic	10.0	10.5	105	ug/L	SW-846 6020A	MS
Barium	10.0	9.71	97	ug/L	SW-846 6020A	MS
Beryllium	10.0	9.71	97	ug/L	SW-846 6020A	MS
Cadmium	10.0	9.68	97	ug/L	SW-846 6020A	MS
Calcium	5000	4930	99	ug/L	SW-846 6020A	MS
Chromium	10.0	10.2	102	ug/L	SW-846 6020A	MS
Cobalt	10.0	10.5	105	ug/L	SW-846 6020A	MS
Copper	10.0	10.5	105	ug/L	SW-846 6020A	MS
Iron	1000	1020	102	ug/L	SW-846 6020A	MS
Lead	10.0	9.98	100	ug/L	SW-846 6020A	MS
Magnesium	1000	958	96	ug/L	SW-846 6020A	MS
Manganese	50.0	50.9	102	ug/L	SW-846 6020A	MS
Molybdenum	10.0	9.58	96	ug/L	SW-846 6020A	MS
Nickel	20.0	21.1	105	ug/L	SW-846 6020A	MS
Potassium	1000	961	96	ug/L	SW-846 6020A	MS
Selenium	10.0	9.40	94	ug/L	SW-846 6020A	MS
Silver	10.0	10.2	102	ug/L	SW-846 6020A	MS
Sodium	1000	990	99	ug/L	SW-846 6020A	MS
Thallium	10.0	10.1	101	ug/L	SW-846 6020A	MS
Titanium	10.0	9.12	91	ug/L	SW-846 6020A	MS
Vanadium	10.0	10.1	101	ug/L	SW-846 6020A	MS
Zinc	200	210	105	ug/L	SW-846 6020A	MS

CCV CONTROL LIMITS EPA 6010/6020A/200.7/200.8 = 90-110, EPA 7470/7471/7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-92-2 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 4

Date Analyzed: 10/31/14 Time: 0907

LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Aluminum	20.0	18.0	90	ug/L	SW-846 6020A	MS
Antimony	2.00	1.78	89	ug/L	SW-846 6020A	MS
Arsenic	1.00	1.01	101	ug/L	SW-846 6020A	MS
Barium	1.00	0.980	98	ug/L	SW-846 6020A	MS
Beryllium	1.00	0.880	88	ug/L	SW-846 6020A	MS
Cadmium	1.00	0.950	95	ug/L	SW-846 6020A	MS
Calcium	500	508	102	ug/L	SW-846 6020A	MS
Chromium	1.00	1.02	102	ug/L	SW-846 6020A	MS
Cobalt	1.00	1.02	102	ug/L	SW-846 6020A	MS
Copper	1.00	1.08	108	ug/L	SW-846 6020A	MS
Iron	100	102	102	ug/L	SW-846 6020A	MS
Lead	1.00	0.940	94	ug/L	SW-846 6020A	MS
Magnesium	100	93.8	94	ug/L	SW-846 6020A	MS
Manganese	5.00	5.12	102	ug/L	SW-846 6020A	MS
Molybdenum	1.00	0.930	93	ug/L	SW-846 6020A	MS
Nickel	2.00	2.14	107	ug/L	SW-846 6020A	MS
Potassium	100	92.4	92	ug/L	SW-846 6020A	MS
Selenium	1.00	0.780	78	ug/L	SW-846 6020A	MS
Silver	1.00	1.02	102	ug/L	SW-846 6020A	MS
Sodium	100	108	108	ug/L	SW-846 6020A	MS
Thallium	1.00	1.03	103	ug/L	SW-846 6020A	MS
Titanium	1.00	1.11	111	ug/L	SW-846 6020A	MS
Vanadium	1.00	1.01	101	ug/L	SW-846 6020A	MS
Zinc	20.0	21.5	107	ug/L	SW-846 6020A	MS

LLCCV CONTROL LIMITS EPA 6020A/EPA 200.8 = 70-130

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-92-2 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 4

Date Analyzed: 10/31/14 Time: 0914

CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	200	190	95	ug/L	SW-846 6020A	MS
Antimony	20.0	18.7	94	ug/L	SW-846 6020A	MS
Arsenic	10.0	10.7	107	ug/L	SW-846 6020A	MS
Barium	10.0	9.66	97	ug/L	SW-846 6020A	MS
Beryllium	10.0	9.74	97	ug/L	SW-846 6020A	MS
Cadmium	10.0	9.68	97	ug/L	SW-846 6020A	MS
Calcium	5000	5040	101	ug/L	SW-846 6020A	MS
Chromium	10.0	10.4	104	ug/L	SW-846 6020A	MS
Cobalt	10.0	10.7	107	ug/L	SW-846 6020A	MS
Copper	10.0	11.0	110	ug/L	SW-846 6020A	MS
Iron	1000	1050	105	ug/L	SW-846 6020A	MS
Lead	10.0	9.67	97	ug/L	SW-846 6020A	MS
Magnesium	1000	973	97	ug/L	SW-846 6020A	MS
Manganese	50.0	52.2	104	ug/L	SW-846 6020A	MS
Molybdenum	10.0	9.55	95	ug/L	SW-846 6020A	MS
Nickel	20.0	21.7	108	ug/L	SW-846 6020A	MS
Potassium	1000	976	98	ug/L	SW-846 6020A	MS
Selenium	10.0	9.22	92	ug/L	SW-846 6020A	MS
Silver	10.0	10.3	103	ug/L	SW-846 6020A	MS
Sodium	1000	1000	100	ug/L	SW-846 6020A	MS
Thallium	10.0	10.3	103	ug/L	SW-846 6020A	MS
Titanium	10.0	8.96	90	ug/L	SW-846 6020A	MS
Vanadium	10.0	10.4	104	ug/L	SW-846 6020A	MS
Zinc	200	217	108	ug/L	SW-846 6020A	MS

CCV CONTROL LIMITS EPA 6010/6020A/200.7/200.8 = 90-110, EPA 7470/7471/7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL
Contract:
Lab Code LA024 Case No.:
SAS No.: SDG No.: 214102205
Calibration Source: 243-92-2 Absolute Standards
Instrument ID: ICPMS1 ICAL ID: 4
Date Analyzed: 10/31/14 Time: 1043

LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	20.0	19.0	95	ug/L	SW-846 6020A	MS
Antimony	2.00	1.78	89	ug/L	SW-846 6020A	MS
Arsenic	1.00	1.05	105	ug/L	SW-846 6020A	MS
Barium	1.00	0.930	93	ug/L	SW-846 6020A	MS
Beryllium	1.00	0.870	87	ug/L	SW-846 6020A	MS
Cadmium	1.00	0.950	95	ug/L	SW-846 6020A	MS
Calcium	500	514	103	ug/L	SW-846 6020A	MS
Chromium	1.00	1.01	101	ug/L	SW-846 6020A	MS
Cobalt	1.00	1.06	106	ug/L	SW-846 6020A	MS
Copper	1.00	1.05	105	ug/L	SW-846 6020A	MS
Iron	100	104	104	ug/L	SW-846 6020A	MS
Lead	1.00	0.940	94	ug/L	SW-846 6020A	MS
Magnesium	100	94.8	95	ug/L	SW-846 6020A	MS
Manganese	5.00	5.06	101	ug/L	SW-846 6020A	MS
Molybdenum	1.00	0.860	86	ug/L	SW-846 6020A	MS
Nickel	2.00	2.17	109	ug/L	SW-846 6020A	MS
Potassium	100	95.7	96	ug/L	SW-846 6020A	MS
Selenium	1.00	0.870	87	ug/L	SW-846 6020A	MS
Silver	1.00	1.02	102	ug/L	SW-846 6020A	MS
Sodium	100	104	104	ug/L	SW-846 6020A	MS
Thallium	1.00	1.01	101	ug/L	SW-846 6020A	MS
Titanium	1.00	0.950	95	ug/L	SW-846 6020A	MS
Vanadium	1.00	1.01	101	ug/L	SW-846 6020A	MS
Zinc	20.0	21.3	107	ug/L	SW-846 6020A	MS

LLCCV CONTROL LIMITS EPA 6020A/EPA 200.8 = 70-130

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-92-2 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 4

Date Analyzed: 10/31/14 Time: 1050

CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	200	187	94	ug/L	SW-846 6020A	MS
Antimony	20.0	18.7	93	ug/L	SW-846 6020A	MS
Arsenic	10.0	10.5	105	ug/L	SW-846 6020A	MS
Barium	10.0	9.54	95	ug/L	SW-846 6020A	MS
Beryllium	10.0	10.1	101	ug/L	SW-846 6020A	MS
Cadmium	10.0	9.56	96	ug/L	SW-846 6020A	MS
Calcium	5000	4980	100	ug/L	SW-846 6020A	MS
Chromium	10.0	10.3	103	ug/L	SW-846 6020A	MS
Cobalt	10.0	10.7	107	ug/L	SW-846 6020A	MS
Copper	10.0	10.9	109	ug/L	SW-846 6020A	MS
Iron	1000	1040	104	ug/L	SW-846 6020A	MS
Lead	10.0	9.76	98	ug/L	SW-846 6020A	MS
Magnesium	1000	959	96	ug/L	SW-846 6020A	MS
Manganese	50.0	51.1	102	ug/L	SW-846 6020A	MS
Molybdenum	10.0	9.38	94	ug/L	SW-846 6020A	MS
Nickel	20.0	21.4	107	ug/L	SW-846 6020A	MS
Potassium	1000	962	96	ug/L	SW-846 6020A	MS
Selenium	10.0	9.36	94	ug/L	SW-846 6020A	MS
Silver	10.0	10.1	101	ug/L	SW-846 6020A	MS
Sodium	1000	994	99	ug/L	SW-846 6020A	MS
Thallium	10.0	10.1	101	ug/L	SW-846 6020A	MS
Titanium	10.0	8.99	90	ug/L	SW-846 6020A	MS
Vanadium	10.0	10.2	102	ug/L	SW-846 6020A	MS
Zinc	200	213	107	ug/L	SW-846 6020A	MS

CCV CONTROL LIMITS EPA 6010/6020A/200.7/200.8 = 90-110, EPA 7470/7471/7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-92-3 CPI Instrument ID: ICPMS1 ICAL ID: 5

Date Analyzed: 10/31/14 Time: 1609

INITIAL CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	1000	933	93	ug/L	SW-846 6020A	MS
Antimony	50.0	48.1	96	ug/L	SW-846 6020A	MS
Arsenic	50.0	46.2	92	ug/L	SW-846 6020A	MS
Barium	50.0	45.7	91	ug/L	SW-846 6020A	MS
Beryllium	50.0	46.4	93	ug/L	SW-846 6020A	MS
Cadmium	50.0	47.2	94	ug/L	SW-846 6020A	MS
Calcium	25000	23100	92	ug/L	SW-846 6020A	MS
Chromium	50.0	46.6	93	ug/L	SW-846 6020A	MS
Cobalt	50.0	46.2	92	ug/L	SW-846 6020A	MS
Copper	50.0	46.5	93	ug/L	SW-846 6020A	MS
Iron	5000	4640	93	ug/L	SW-846 6020A	MS
Lead	50.0	45.5	91	ug/L	SW-846 6020A	MS
Magnesium	5000	4670	93	ug/L	SW-846 6020A	MS
Manganese	50.0	48.9	98	ug/L	SW-846 6020A	MS
Molybdenum	50.0	45.6	91	ug/L	SW-846 6020A	MS
Nickel	100	93.2	93	ug/L	SW-846 6020A	MS
Potassium	5000	4610	92	ug/L	SW-846 6020A	MS
Selenium	25.0	24.2	97	ug/L	SW-846 6020A	MS
Silver	50.0	48.3	97	ug/L	SW-846 6020A	MS
Sodium	5000	4630	93	ug/L	SW-846 6020A	MS
Thallium	50.0	46.6	93	ug/L	SW-846 6020A	MS
Titanium	50.0	46.8	94	ug/L	SW-846 6020A	MS
Vanadium	50.0	45.9	92	ug/L	SW-846 6020A	MS
Zinc	1000	939	94	ug/L	SW-846 6020A	MS

ICV CONTROL LIMITS EPA 6010/6020/200.8 = 90-110 EPA 200.7 = 95-105

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-92-2 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 5

Date Analyzed: 10/31/14 Time: 1623

LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Aluminum	20.0	20.8	104	ug/L	SW-846 6020A	MS
Antimony	2.00	1.95	98	ug/L	SW-846 6020A	MS
Arsenic	1.00	0.990	99	ug/L	SW-846 6020A	MS
Barium	1.00	1.05	105	ug/L	SW-846 6020A	MS
Beryllium	1.00	1.14	114	ug/L	SW-846 6020A	MS
Cadmium	1.00	1.01	101	ug/L	SW-846 6020A	MS
Calcium	500	524	105	ug/L	SW-846 6020A	MS
Chromium	1.00	1.01	101	ug/L	SW-846 6020A	MS
Cobalt	1.00	1.06	106	ug/L	SW-846 6020A	MS
Copper	1.00	1.07	107	ug/L	SW-846 6020A	MS
Iron	100	102	102	ug/L	SW-846 6020A	MS
Lead	1.00	1.04	104	ug/L	SW-846 6020A	MS
Magnesium	100	103	103	ug/L	SW-846 6020A	MS
Manganese	5.00	5.22	104	ug/L	SW-846 6020A	MS
Molybdenum	1.00	1.01	101	ug/L	SW-846 6020A	MS
Nickel	2.00	2.09	104	ug/L	SW-846 6020A	MS
Potassium	100	97.6	98	ug/L	SW-846 6020A	MS
Selenium	1.00	1.04	104	ug/L	SW-846 6020A	MS
Silver	1.00	1.03	103	ug/L	SW-846 6020A	MS
Sodium	100	102	102	ug/L	SW-846 6020A	MS
Thallium	1.00	1.04	104	ug/L	SW-846 6020A	MS
Titanium	1.00	0.940	94	ug/L	SW-846 6020A	MS
Vanadium	1.00	1.03	103	ug/L	SW-846 6020A	MS
Zinc	20.0	21.3	106	ug/L	SW-846 6020A	MS

LLCCV CONTROL LIMITS EPA 6020A/EPA 200.8 = 70-130

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-92-2 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 5

Date Analyzed: 10/31/14 Time: 2257

LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Aluminum	20.0	19.5	97	ug/L	SW-846 6020A	MS
Antimony	2.00	1.78	89	ug/L	SW-846 6020A	MS
Arsenic	1.00	1.03	103	ug/L	SW-846 6020A	MS
Barium	1.00	0.940	94	ug/L	SW-846 6020A	MS
Beryllium	1.00	0.980	98	ug/L	SW-846 6020A	MS
Cadmium	1.00	1.01	101	ug/L	SW-846 6020A	MS
Calcium	500	529	106	ug/L	SW-846 6020A	MS
Chromium	1.00	1.04	104	ug/L	SW-846 6020A	MS
Cobalt	1.00	1.04	104	ug/L	SW-846 6020A	MS
Copper	1.00	1.17	117	ug/L	SW-846 6020A	MS
Iron	100	100	100	ug/L	SW-846 6020A	MS
Lead	1.00	0.980	98	ug/L	SW-846 6020A	MS
Magnesium	100	102	102	ug/L	SW-846 6020A	MS
Manganese	5.00	5.20	104	ug/L	SW-846 6020A	MS
Molybdenum	1.00	0.950	95	ug/L	SW-846 6020A	MS
Nickel	2.00	2.18	109	ug/L	SW-846 6020A	MS
Potassium	100	93.3	93	ug/L	SW-846 6020A	MS
Selenium	1.00	0.960	96	ug/L	SW-846 6020A	MS
Silver	1.00	1.02	102	ug/L	SW-846 6020A	MS
Sodium	100	136	136	ug/L	SW-846 6020A	MS
Thallium	1.00	1.02	102	ug/L	SW-846 6020A	MS
Titanium	1.00	1.30	130	ug/L	SW-846 6020A	MS
Vanadium	1.00	1.03	103	ug/L	SW-846 6020A	MS
Zinc	20.0	21.7	108	ug/L	SW-846 6020A	MS

LLCCV CONTROL LIMITS EPA 6020A/EPA 200.8 = 70-130

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-92-2 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 5

Date Analyzed: 10/31/14 Time: 2304

CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	200	193	97	ug/L	SW-846 6020A	MS
Antimony	20.0	18.1	90	ug/L	SW-846 6020A	MS
Arsenic	10.0	10.2	102	ug/L	SW-846 6020A	MS
Barium	10.0	9.82	98	ug/L	SW-846 6020A	MS
Beryllium	10.0	10.8	108	ug/L	SW-846 6020A	MS
Cadmium	10.0	9.77	98	ug/L	SW-846 6020A	MS
Calcium	5000	4900	98	ug/L	SW-846 6020A	MS
Chromium	10.0	10.2	102	ug/L	SW-846 6020A	MS
Cobalt	10.0	10.4	104	ug/L	SW-846 6020A	MS
Copper	10.0	10.8	108	ug/L	SW-846 6020A	MS
Iron	1000	1030	103	ug/L	SW-846 6020A	MS
Lead	10.0	10.0	100	ug/L	SW-846 6020A	MS
Magnesium	1000	994	99	ug/L	SW-846 6020A	MS
Manganese	50.0	51.2	102	ug/L	SW-846 6020A	MS
Molybdenum	10.0	9.44	94	ug/L	SW-846 6020A	MS
Nickel	20.0	21.0	105	ug/L	SW-846 6020A	MS
Potassium	1000	961	96	ug/L	SW-846 6020A	MS
Selenium	10.0	9.64	96	ug/L	SW-846 6020A	MS
Silver	10.0	10.5	105	ug/L	SW-846 6020A	MS
Sodium	1000	1040	104	ug/L	SW-846 6020A	MS
Thallium	10.0	10.1	101	ug/L	SW-846 6020A	MS
Titanium	10.0	9.83	98	ug/L	SW-846 6020A	MS
Vanadium	10.0	10.1	101	ug/L	SW-846 6020A	MS
Zinc	200	211	106	ug/L	SW-846 6020A	MS

CCV CONTROL LIMITS EPA 6010/6020A/200.7/200.8 = 90-110, EPA 7470/7471/7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-92-2 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 5

Date Analyzed: 11/01/14 Time: 0033

LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Aluminum	20.0	19.8	99	ug/L	SW-846 6020A	MS
Antimony	2.00	1.68	84	ug/L	SW-846 6020A	MS
Arsenic	1.00	1.04	104	ug/L	SW-846 6020A	MS
Barium	1.00	0.990	99	ug/L	SW-846 6020A	MS
Beryllium	1.00	1.24	124	ug/L	SW-846 6020A	MS
Cadmium	1.00	0.970	97	ug/L	SW-846 6020A	MS
Calcium	500	501	100	ug/L	SW-846 6020A	MS
Chromium	1.00	1.04	104	ug/L	SW-846 6020A	MS
Cobalt	1.00	1.03	103	ug/L	SW-846 6020A	MS
Copper	1.00	1.11	111	ug/L	SW-846 6020A	MS
Iron	100	104	104	ug/L	SW-846 6020A	MS
Lead	1.00	0.980	98	ug/L	SW-846 6020A	MS
Magnesium	100	101	101	ug/L	SW-846 6020A	MS
Manganese	5.00	5.07	101	ug/L	SW-846 6020A	MS
Molybdenum	1.00	0.950	95	ug/L	SW-846 6020A	MS
Nickel	2.00	2.13	106	ug/L	SW-846 6020A	MS
Potassium	100	93.0	93	ug/L	SW-846 6020A	MS
Selenium	1.00	0.910	91	ug/L	SW-846 6020A	MS
Silver	1.00	1.00	100	ug/L	SW-846 6020A	MS
Sodium	100	133	133	ug/L	SW-846 6020A	MS
Thallium	1.00	1.03	103	ug/L	SW-846 6020A	MS
Titanium	1.00	1.38	138	ug/L	SW-846 6020A	MS
Vanadium	1.00	1.03	103	ug/L	SW-846 6020A	MS
Zinc	20.0	21.6	108	ug/L	SW-846 6020A	MS

LLCCV CONTROL LIMITS EPA 6020A/EPA 200.8 = 70-130

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-92-2 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 5

Date Analyzed: 11/01/14 Time: 0041

CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	200	200	100	ug/L	SW-846 6020A	MS
Antimony	20.0	18.4	92	ug/L	SW-846 6020A	MS
Arsenic	10.0	10.3	103	ug/L	SW-846 6020A	MS
Barium	10.0	9.57	96	ug/L	SW-846 6020A	MS
Beryllium	10.0	10.8	108	ug/L	SW-846 6020A	MS
Cadmium	10.0	9.85	99	ug/L	SW-846 6020A	MS
Calcium	5000	5040	101	ug/L	SW-846 6020A	MS
Chromium	10.0	10.6	106	ug/L	SW-846 6020A	MS
Cobalt	10.0	10.7	107	ug/L	SW-846 6020A	MS
Copper	10.0	11.0	110	ug/L	SW-846 6020A	MS
Iron	1000	1050	105	ug/L	SW-846 6020A	MS
Lead	10.0	10.1	101	ug/L	SW-846 6020A	MS
Magnesium	1000	1020	102	ug/L	SW-846 6020A	MS
Manganese	50.0	51.8	104	ug/L	SW-846 6020A	MS
Molybdenum	10.0	9.56	96	ug/L	SW-846 6020A	MS
Nickel	20.0	21.4	107	ug/L	SW-846 6020A	MS
Potassium	1000	992	99	ug/L	SW-846 6020A	MS
Selenium	10.0	9.86	99	ug/L	SW-846 6020A	MS
Silver	10.0	10.4	104	ug/L	SW-846 6020A	MS
Sodium	1000	1060	106	ug/L	SW-846 6020A	MS
Thallium	10.0	10.4	104	ug/L	SW-846 6020A	MS
Titanium	10.0	9.77	98	ug/L	SW-846 6020A	MS
Vanadium	10.0	10.2	102	ug/L	SW-846 6020A	MS
Zinc	200	214	107	ug/L	SW-846 6020A	MS

CCV CONTROL LIMITS EPA 6010/6020A/200.7/200.8 = 90-110, EPA 7470/7471/7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-92-2 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 5

Date Analyzed: 11/01/14 Time: 0225

LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Aluminum	20.0	19.5	97	ug/L	SW-846 6020A	MS
Antimony	2.00	1.72	86	ug/L	SW-846 6020A	MS
Arsenic	1.00	1.00	100	ug/L	SW-846 6020A	MS
Barium	1.00	1.00	100	ug/L	SW-846 6020A	MS
Beryllium	1.00	0.920	92	ug/L	SW-846 6020A	MS
Cadmium	1.00	0.970	97	ug/L	SW-846 6020A	MS
Calcium	500	492	98	ug/L	SW-846 6020A	MS
Chromium	1.00	1.03	103	ug/L	SW-846 6020A	MS
Cobalt	1.00	1.06	106	ug/L	SW-846 6020A	MS
Copper	1.00	1.16	116	ug/L	SW-846 6020A	MS
Iron	100	102	102	ug/L	SW-846 6020A	MS
Lead	1.00	0.990	99	ug/L	SW-846 6020A	MS
Magnesium	100	102	102	ug/L	SW-846 6020A	MS
Manganese	5.00	4.95	99	ug/L	SW-846 6020A	MS
Molybdenum	1.00	0.950	95	ug/L	SW-846 6020A	MS
Nickel	2.00	2.19	110	ug/L	SW-846 6020A	MS
Potassium	100	95.3	95	ug/L	SW-846 6020A	MS
Selenium	1.00	1.08	108	ug/L	SW-846 6020A	MS
Silver	1.00	1.04	104	ug/L	SW-846 6020A	MS
Sodium	100	130	130	ug/L	SW-846 6020A	MS
Thallium	1.00	1.05	105	ug/L	SW-846 6020A	MS
Titanium	1.00	0.950	95	ug/L	SW-846 6020A	MS
Vanadium	1.00	1.00	100	ug/L	SW-846 6020A	MS
Zinc	20.0	21.6	108	ug/L	SW-846 6020A	MS

LLCCV CONTROL LIMITS EPA 6020A/EPA 200.8 = 70-130

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-92-2 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 5

Date Analyzed: 11/01/14 Time: 0232

CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Iron	1000	1040	104	ug/L	SW-846 6020A	MS
Lead	10.0	9.94	99	ug/L	SW-846 6020A	MS
Magnesium	1000	1000	100	ug/L	SW-846 6020A	MS
Manganese	50.0	51.0	102	ug/L	SW-846 6020A	MS
Molybdenum	10.0	9.74	97	ug/L	SW-846 6020A	MS
Nickel	20.0	21.2	106	ug/L	SW-846 6020A	MS
Potassium	1000	961	96	ug/L	SW-846 6020A	MS
Selenium	10.0	9.36	94	ug/L	SW-846 6020A	MS
Silver	10.0	10.2	102	ug/L	SW-846 6020A	MS
Sodium	1000	1040	104	ug/L	SW-846 6020A	MS
Thallium	10.0	10.2	102	ug/L	SW-846 6020A	MS
Titanium	10.0	9.50	95	ug/L	SW-846 6020A	MS
Vanadium	10.0	10.2	102	ug/L	SW-846 6020A	MS
Zinc	200	212	106	ug/L	SW-846 6020A	MS
Aluminum	200	195	98	ug/L	SW-846 6020A	MS
Antimony	20.0	18.1	91	ug/L	SW-846 6020A	MS
Arsenic	10.0	10.3	103	ug/L	SW-846 6020A	MS
Barium	10.0	9.54	95	ug/L	SW-846 6020A	MS
Beryllium	10.0	10.5	105	ug/L	SW-846 6020A	MS
Cadmium	10.0	9.91	99	ug/L	SW-846 6020A	MS
Calcium	5000	4960	99	ug/L	SW-846 6020A	MS
Chromium	10.0	10.3	103	ug/L	SW-846 6020A	MS
Cobalt	10.0	10.5	105	ug/L	SW-846 6020A	MS
Copper	10.0	10.6	106	ug/L	SW-846 6020A	MS

CCV CONTROL LIMITS EPA 6010/6020A/200.7/200.8 = 90-110, EPA 7470/7471/7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-93-9 CPI Instrument ID: ICPMS2 ICAL ID: 6

Date Analyzed: 11/03/14 Time: 1033

INITIAL CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Aluminum	1000	1020	102	ug/L	SW-846 6020A	MS
Antimony	50.0	50.3	101	ug/L	SW-846 6020A	MS
Arsenic	50.0	50.1	100	ug/L	SW-846 6020A	MS
Barium	50.0	50.2	100	ug/L	SW-846 6020A	MS
Beryllium	50.0	52.6	105	ug/L	SW-846 6020A	MS
Cadmium	50.0	51.2	102	ug/L	SW-846 6020A	MS
Calcium	25000	25500	102	ug/L	SW-846 6020A	MS
Chromium	50.0	51.8	104	ug/L	SW-846 6020A	MS
Cobalt	50.0	51.5	103	ug/L	SW-846 6020A	MS
Copper	50.0	52.7	105	ug/L	SW-846 6020A	MS
Iron	5000	5130	103	ug/L	SW-846 6020A	MS
Lead	50.0	49.7	99	ug/L	SW-846 6020A	MS
Magnesium	5000	5270	105	ug/L	SW-846 6020A	MS
Manganese	50.0	48.4	97	ug/L	SW-846 6020A	MS
Molybdenum	50.0	50.1	100	ug/L	SW-846 6020A	MS
Nickel	100	105	105	ug/L	SW-846 6020A	MS
Potassium	5000	5150	103	ug/L	SW-846 6020A	MS
Selenium	25.0	24.9	99	ug/L	SW-846 6020A	MS
Silver	50.0	48.6	97	ug/L	SW-846 6020A	MS
Sodium	5000	5140	103	ug/L	SW-846 6020A	MS
Thallium	50.0	49.5	99	ug/L	SW-846 6020A	MS
Titanium	50.0	51.0	102	ug/L	SW-846 6020A	MS
Vanadium	50.0	50.9	102	ug/L	SW-846 6020A	MS
Zinc	1000	1040	104	ug/L	SW-846 6020A	MS

ICV CONTROL LIMITS EPA 6010/6020/200.8 = 90-110 EPA 200.7 = 95-105

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-93-8 Absolute Standards Instrument ID: ICPMS2 ICAL ID: 6

Date Analyzed: 11/03/14 Time: 1038

LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	20.0	20.9	104	ug/L	SW-846 6020A	MS
Antimony	2.00	2.05	102	ug/L	SW-846 6020A	MS
Arsenic	1.00	1.03	103	ug/L	SW-846 6020A	MS
Barium	1.00	1.00	100	ug/L	SW-846 6020A	MS
Beryllium	1.00	1.06	106	ug/L	SW-846 6020A	MS
Cadmium	1.00	0.990	99	ug/L	SW-846 6020A	MS
Calcium	500	509	102	ug/L	SW-846 6020A	MS
Chromium	1.00	1.03	103	ug/L	SW-846 6020A	MS
Cobalt	1.00	1.07	107	ug/L	SW-846 6020A	MS
Copper	1.00	1.09	109	ug/L	SW-846 6020A	MS
Iron	100	102	102	ug/L	SW-846 6020A	MS
Lead	1.00	1.01	101	ug/L	SW-846 6020A	MS
Magnesium	100	105	105	ug/L	SW-846 6020A	MS
Manganese	5.00	4.99	100	ug/L	SW-846 6020A	MS
Molybdenum	1.00	0.990	99	ug/L	SW-846 6020A	MS
Nickel	2.00	2.23	112	ug/L	SW-846 6020A	MS
Potassium	100	96.2	96	ug/L	SW-846 6020A	MS
Selenium	1.00	0.930	93	ug/L	SW-846 6020A	MS
Silver	1.00	1.00	100	ug/L	SW-846 6020A	MS
Sodium	100	107	107	ug/L	SW-846 6020A	MS
Thallium	1.00	0.980	98	ug/L	SW-846 6020A	MS
Titanium	1.00	1.04	104	ug/L	SW-846 6020A	MS
Vanadium	1.00	1.03	103	ug/L	SW-846 6020A	MS
Zinc	20.0	19.1	96	ug/L	SW-846 6020A	MS

LLCCV CONTROL LIMITS EPA 6020A/EPA 200.8 = 70-130

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-93-8 Absolute Standards Instrument ID: ICPMS2 ICAL ID: 6

Date Analyzed: 11/03/14 Time: 1121

LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Aluminum	20.0	20.5	102	ug/L	SW-846 6020A	MS
Antimony	2.00	2.04	102	ug/L	SW-846 6020A	MS
Arsenic	1.00	0.980	98	ug/L	SW-846 6020A	MS
Barium	1.00	1.03	103	ug/L	SW-846 6020A	MS
Beryllium	1.00	1.08	108	ug/L	SW-846 6020A	MS
Cadmium	1.00	1.02	102	ug/L	SW-846 6020A	MS
Calcium	500	494	99	ug/L	SW-846 6020A	MS
Chromium	1.00	1.03	103	ug/L	SW-846 6020A	MS
Cobalt	1.00	1.08	108	ug/L	SW-846 6020A	MS
Copper	1.00	1.12	112	ug/L	SW-846 6020A	MS
Iron	100	105	105	ug/L	SW-846 6020A	MS
Lead	1.00	1.00	100	ug/L	SW-846 6020A	MS
Magnesium	100	108	108	ug/L	SW-846 6020A	MS
Manganese	5.00	4.89	98	ug/L	SW-846 6020A	MS
Molybdenum	1.00	0.970	97	ug/L	SW-846 6020A	MS
Nickel	2.00	2.18	109	ug/L	SW-846 6020A	MS
Potassium	100	96.3	96	ug/L	SW-846 6020A	MS
Selenium	1.00	0.900	90	ug/L	SW-846 6020A	MS
Silver	1.00	1.01	101	ug/L	SW-846 6020A	MS
Sodium	100	116	116	ug/L	SW-846 6020A	MS
Thallium	1.00	0.980	98	ug/L	SW-846 6020A	MS
Titanium	1.00	0.920	92	ug/L	SW-846 6020A	MS
Vanadium	1.00	0.970	97	ug/L	SW-846 6020A	MS
Zinc	20.0	19.3	96	ug/L	SW-846 6020A	MS

LLCCV CONTROL LIMITS EPA 6020A/EPA 200.8 = 70-130

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-93-8 Absolute Standards Instrument ID: ICPMS2 ICAL ID: 6

Date Analyzed: 11/03/14 Time: 1123

CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	200	205	102	ug/L	SW-846 6020A	MS
Antimony	20.0	19.8	99	ug/L	SW-846 6020A	MS
Arsenic	10.0	9.97	100	ug/L	SW-846 6020A	MS
Barium	10.0	9.88	99	ug/L	SW-846 6020A	MS
Beryllium	10.0	10.6	106	ug/L	SW-846 6020A	MS
Cadmium	10.0	9.81	98	ug/L	SW-846 6020A	MS
Calcium	5000	5030	101	ug/L	SW-846 6020A	MS
Chromium	10.0	10.3	103	ug/L	SW-846 6020A	MS
Cobalt	10.0	10.4	104	ug/L	SW-846 6020A	MS
Copper	10.0	10.7	107	ug/L	SW-846 6020A	MS
Iron	1000	1030	103	ug/L	SW-846 6020A	MS
Lead	10.0	9.79	98	ug/L	SW-846 6020A	MS
Magnesium	1000	1060	106	ug/L	SW-846 6020A	MS
Manganese	50.0	49.3	99	ug/L	SW-846 6020A	MS
Molybdenum	10.0	9.58	96	ug/L	SW-846 6020A	MS
Nickel	20.0	21.2	106	ug/L	SW-846 6020A	MS
Potassium	1000	980	98	ug/L	SW-846 6020A	MS
Selenium	10.0	9.62	96	ug/L	SW-846 6020A	MS
Silver	10.0	9.71	97	ug/L	SW-846 6020A	MS
Sodium	1000	1060	106	ug/L	SW-846 6020A	MS
Thallium	10.0	9.63	96	ug/L	SW-846 6020A	MS
Titanium	10.0	9.84	98	ug/L	SW-846 6020A	MS
Vanadium	10.0	10.2	102	ug/L	SW-846 6020A	MS
Zinc	200	202	101	ug/L	SW-846 6020A	MS

CCV CONTROL LIMITS EPA 6010/6020A/200.7/200.8 = 90-110, EPA 7470/7471/7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-93-8 Absolute Standards Instrument ID: ICPMS2 ICAL ID: 6

Date Analyzed: 11/03/14 Time: 1153

LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Aluminum	20.0	21.4	107	ug/L	SW-846 6020A	MS
Antimony	2.00	1.99	100	ug/L	SW-846 6020A	MS
Arsenic	1.00	1.01	101	ug/L	SW-846 6020A	MS
Barium	1.00	1.00	100	ug/L	SW-846 6020A	MS
Beryllium	1.00	1.06	106	ug/L	SW-846 6020A	MS
Cadmium	1.00	1.00	100	ug/L	SW-846 6020A	MS
Calcium	500	500	100	ug/L	SW-846 6020A	MS
Chromium	1.00	0.980	98	ug/L	SW-846 6020A	MS
Cobalt	1.00	1.07	107	ug/L	SW-846 6020A	MS
Copper	1.00	1.11	111	ug/L	SW-846 6020A	MS
Iron	100	103	103	ug/L	SW-846 6020A	MS
Lead	1.00	0.980	98	ug/L	SW-846 6020A	MS
Magnesium	100	108	108	ug/L	SW-846 6020A	MS
Manganese	5.00	4.96	99	ug/L	SW-846 6020A	MS
Molybdenum	1.00	0.980	98	ug/L	SW-846 6020A	MS
Nickel	2.00	2.16	108	ug/L	SW-846 6020A	MS
Potassium	100	104	104	ug/L	SW-846 6020A	MS
Selenium	1.00	1.01	101	ug/L	SW-846 6020A	MS
Silver	1.00	0.990	99	ug/L	SW-846 6020A	MS
Sodium	100	118	118	ug/L	SW-846 6020A	MS
Thallium	1.00	0.960	96	ug/L	SW-846 6020A	MS
Titanium	1.00	0.940	94	ug/L	SW-846 6020A	MS
Vanadium	1.00	0.990	99	ug/L	SW-846 6020A	MS
Zinc	20.0	19.2	96	ug/L	SW-846 6020A	MS

LLCCV CONTROL LIMITS EPA 6020A/EPA 200.8 = 70-130

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-93-8 Absolute Standards Instrument ID: ICPMS2 ICAL ID: 6

Date Analyzed: 11/03/14 Time: 1155

CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	200	205	103	ug/L	SW-846 6020A	MS
Antimony	20.0	20.1	101	ug/L	SW-846 6020A	MS
Arsenic	10.0	10.0	100	ug/L	SW-846 6020A	MS
Barium	10.0	10.1	101	ug/L	SW-846 6020A	MS
Beryllium	10.0	10.7	107	ug/L	SW-846 6020A	MS
Cadmium	10.0	9.94	99	ug/L	SW-846 6020A	MS
Calcium	5000	5070	101	ug/L	SW-846 6020A	MS
Chromium	10.0	10.3	103	ug/L	SW-846 6020A	MS
Cobalt	10.0	10.4	104	ug/L	SW-846 6020A	MS
Copper	10.0	10.5	105	ug/L	SW-846 6020A	MS
Iron	1000	1020	102	ug/L	SW-846 6020A	MS
Lead	10.0	9.87	99	ug/L	SW-846 6020A	MS
Magnesium	1000	1060	106	ug/L	SW-846 6020A	MS
Manganese	50.0	49.7	99	ug/L	SW-846 6020A	MS
Molybdenum	10.0	9.73	97	ug/L	SW-846 6020A	MS
Nickel	20.0	20.9	104	ug/L	SW-846 6020A	MS
Potassium	1000	1000	100	ug/L	SW-846 6020A	MS
Selenium	10.0	9.76	98	ug/L	SW-846 6020A	MS
Silver	10.0	9.94	99	ug/L	SW-846 6020A	MS
Sodium	1000	1060	106	ug/L	SW-846 6020A	MS
Thallium	10.0	9.73	97	ug/L	SW-846 6020A	MS
Titanium	10.0	9.80	98	ug/L	SW-846 6020A	MS
Vanadium	10.0	10.2	102	ug/L	SW-846 6020A	MS
Zinc	200	201	100	ug/L	SW-846 6020A	MS

CCV CONTROL LIMITS EPA 6010/6020A/200.7/200.8 = 90-110, EPA 7470/7471/7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-93-9 CPI Instrument ID: ICPMS1 ICAL ID: 7

Date Analyzed: 11/03/14 Time: 1059

INITIAL CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	1000	1010	101	ug/L	SW-846 6020A	MS
Antimony	50.0	48.8	98	ug/L	SW-846 6020A	MS
Arsenic	50.0	50.7	101	ug/L	SW-846 6020A	MS
Barium	50.0	49.0	98	ug/L	SW-846 6020A	MS
Beryllium	50.0	51.6	103	ug/L	SW-846 6020A	MS
Cadmium	50.0	50.3	101	ug/L	SW-846 6020A	MS
Calcium	25000	25400	102	ug/L	SW-846 6020A	MS
Chromium	50.0	51.2	102	ug/L	SW-846 6020A	MS
Cobalt	50.0	50.8	102	ug/L	SW-846 6020A	MS
Copper	50.0	52.0	104	ug/L	SW-846 6020A	MS
Iron	5000	5090	102	ug/L	SW-846 6020A	MS
Lead	50.0	50.1	100	ug/L	SW-846 6020A	MS
Magnesium	5000	5190	104	ug/L	SW-846 6020A	MS
Manganese	50.0	49.3	99	ug/L	SW-846 6020A	MS
Molybdenum	50.0	49.3	99	ug/L	SW-846 6020A	MS
Nickel	100	103	103	ug/L	SW-846 6020A	MS
Potassium	5000	5060	101	ug/L	SW-846 6020A	MS
Selenium	25.0	24.1	97	ug/L	SW-846 6020A	MS
Silver	50.0	49.4	99	ug/L	SW-846 6020A	MS
Sodium	5000	5080	102	ug/L	SW-846 6020A	MS
Thallium	50.0	47.3	95	ug/L	SW-846 6020A	MS
Titanium	50.0	50.3	101	ug/L	SW-846 6020A	MS
Vanadium	50.0	51.1	102	ug/L	SW-846 6020A	MS
Zinc	1000	1040	104	ug/L	SW-846 6020A	MS

ICV CONTROL LIMITS EPA 6010/6020/200.8 = 90-110 EPA 200.7 = 95-105

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-93-8 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 7

Date Analyzed: 11/03/14 Time: 1121

LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Aluminum	20.0	19.3	96	ug/L	SW-846 6020A	MS
Antimony	2.00	1.85	92	ug/L	SW-846 6020A	MS
Arsenic	1.00	1.04	104	ug/L	SW-846 6020A	MS
Barium	1.00	0.950	95	ug/L	SW-846 6020A	MS
Beryllium	1.00	0.920	92	ug/L	SW-846 6020A	MS
Cadmium	1.00	1.00	100	ug/L	SW-846 6020A	MS
Calcium	500	510	102	ug/L	SW-846 6020A	MS
Chromium	1.00	1.03	103	ug/L	SW-846 6020A	MS
Cobalt	1.00	1.06	106	ug/L	SW-846 6020A	MS
Copper	1.00	1.05	105	ug/L	SW-846 6020A	MS
Iron	100	103	103	ug/L	SW-846 6020A	MS
Lead	1.00	1.00	100	ug/L	SW-846 6020A	MS
Magnesium	100	104	104	ug/L	SW-846 6020A	MS
Manganese	5.00	5.13	103	ug/L	SW-846 6020A	MS
Molybdenum	1.00	0.960	96	ug/L	SW-846 6020A	MS
Nickel	2.00	2.11	105	ug/L	SW-846 6020A	MS
Potassium	100	101	101	ug/L	SW-846 6020A	MS
Selenium	1.00	1.03	103	ug/L	SW-846 6020A	MS
Silver	1.00	1.02	102	ug/L	SW-846 6020A	MS
Sodium	100	104	104	ug/L	SW-846 6020A	MS
Thallium	1.00	0.940	94	ug/L	SW-846 6020A	MS
Titanium	1.00	0.910	91	ug/L	SW-846 6020A	MS
Vanadium	1.00	1.04	104	ug/L	SW-846 6020A	MS
Zinc	20.0	20.8	104	ug/L	SW-846 6020A	MS

LLCCV CONTROL LIMITS EPA 6020A/EPA 200.8 = 70-130

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-93-8 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 7

Date Analyzed: 11/03/14 Time: 1440

LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	20.0	18.8	94	ug/L	SW-846 6020A	MS
Antimony	2.00	1.87	94	ug/L	SW-846 6020A	MS
Arsenic	1.00	1.02	102	ug/L	SW-846 6020A	MS
Barium	1.00	0.990	99	ug/L	SW-846 6020A	MS
Beryllium	1.00	1.06	106	ug/L	SW-846 6020A	MS
Cadmium	1.00	0.980	98	ug/L	SW-846 6020A	MS
Calcium	500	496	99	ug/L	SW-846 6020A	MS
Chromium	1.00	1.01	101	ug/L	SW-846 6020A	MS
Cobalt	1.00	1.04	104	ug/L	SW-846 6020A	MS
Copper	1.00	1.05	105	ug/L	SW-846 6020A	MS
Iron	100	102	102	ug/L	SW-846 6020A	MS
Lead	1.00	0.970	97	ug/L	SW-846 6020A	MS
Magnesium	100	99.4	99	ug/L	SW-846 6020A	MS
Manganese	5.00	5.06	101	ug/L	SW-846 6020A	MS
Molybdenum	1.00	0.940	94	ug/L	SW-846 6020A	MS
Nickel	2.00	2.04	102	ug/L	SW-846 6020A	MS
Potassium	100	96.9	97	ug/L	SW-846 6020A	MS
Selenium	1.00	1.03	103	ug/L	SW-846 6020A	MS
Silver	1.00	1.03	103	ug/L	SW-846 6020A	MS
Sodium	100	106	106	ug/L	SW-846 6020A	MS
Thallium	1.00	0.920	92	ug/L	SW-846 6020A	MS
Titanium	1.00	0.950	95	ug/L	SW-846 6020A	MS
Vanadium	1.00	1.02	102	ug/L	SW-846 6020A	MS
Zinc	20.0	20.8	104	ug/L	SW-846 6020A	MS

LLCCV CONTROL LIMITS EPA 6020A/EPA 200.8 = 70-130

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-93-8 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 7

Date Analyzed: 11/03/14 Time: 1448

CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	200	189	95	ug/L	SW-846 6020A	MS
Antimony	20.0	19.1	95	ug/L	SW-846 6020A	MS
Arsenic	10.0	10.1	101	ug/L	SW-846 6020A	MS
Barium	10.0	9.58	96	ug/L	SW-846 6020A	MS
Beryllium	10.0	10.2	102	ug/L	SW-846 6020A	MS
Cadmium	10.0	9.78	98	ug/L	SW-846 6020A	MS
Calcium	5000	4950	99	ug/L	SW-846 6020A	MS
Chromium	10.0	9.99	100	ug/L	SW-846 6020A	MS
Cobalt	10.0	10.0	100	ug/L	SW-846 6020A	MS
Copper	10.0	10.1	101	ug/L	SW-846 6020A	MS
Iron	1000	1010	101	ug/L	SW-846 6020A	MS
Lead	10.0	9.67	97	ug/L	SW-846 6020A	MS
Magnesium	1000	978	98	ug/L	SW-846 6020A	MS
Manganese	50.0	50.0	100	ug/L	SW-846 6020A	MS
Molybdenum	10.0	9.58	96	ug/L	SW-846 6020A	MS
Nickel	20.0	20.5	102	ug/L	SW-846 6020A	MS
Potassium	1000	978	98	ug/L	SW-846 6020A	MS
Selenium	10.0	9.80	98	ug/L	SW-846 6020A	MS
Silver	10.0	9.86	99	ug/L	SW-846 6020A	MS
Sodium	1000	1000	100	ug/L	SW-846 6020A	MS
Thallium	10.0	9.26	93	ug/L	SW-846 6020A	MS
Titanium	10.0	10.1	101	ug/L	SW-846 6020A	MS
Vanadium	10.0	10.1	101	ug/L	SW-846 6020A	MS
Zinc	200	204	102	ug/L	SW-846 6020A	MS

CCV CONTROL LIMITS EPA 6010/6020A/200.7/200.8 = 90-110, EPA 7470/7471/7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-93-8 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 7

Date Analyzed: 11/03/14 Time: 1616

LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Aluminum	20.0	19.2	96	ug/L	SW-846 6020A	MS
Antimony	2.00	1.79	89	ug/L	SW-846 6020A	MS
Arsenic	1.00	1.00	100	ug/L	SW-846 6020A	MS
Barium	1.00	0.960	96	ug/L	SW-846 6020A	MS
Beryllium	1.00	0.980	98	ug/L	SW-846 6020A	MS
Cadmium	1.00	0.940	94	ug/L	SW-846 6020A	MS
Calcium	500	486	97	ug/L	SW-846 6020A	MS
Chromium	1.00	1.03	103	ug/L	SW-846 6020A	MS
Cobalt	1.00	1.03	103	ug/L	SW-846 6020A	MS
Copper	1.00	1.10	110	ug/L	SW-846 6020A	MS
Iron	100	102	102	ug/L	SW-846 6020A	MS
Lead	1.00	0.950	95	ug/L	SW-846 6020A	MS
Magnesium	100	96.4	96	ug/L	SW-846 6020A	MS
Manganese	5.00	5.07	101	ug/L	SW-846 6020A	MS
Molybdenum	1.00	0.960	96	ug/L	SW-846 6020A	MS
Nickel	2.00	2.09	104	ug/L	SW-846 6020A	MS
Potassium	100	101	101	ug/L	SW-846 6020A	MS
Selenium	1.00	1.08	108	ug/L	SW-846 6020A	MS
Silver	1.00	1.02	102	ug/L	SW-846 6020A	MS
Sodium	100	115	115	ug/L	SW-846 6020A	MS
Thallium	1.00	0.920	92	ug/L	SW-846 6020A	MS
Titanium	1.00	1.19	119	ug/L	SW-846 6020A	MS
Vanadium	1.00	1.03	103	ug/L	SW-846 6020A	MS
Zinc	20.0	20.8	104	ug/L	SW-846 6020A	MS

LLCCV CONTROL LIMITS EPA 6020A/EPA 200.8 = 70-130

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-93-8 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 7

Date Analyzed: 11/03/14 Time: 1624

CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	200	187	94	ug/L	SW-846 6020A	MS
Antimony	20.0	19.1	96	ug/L	SW-846 6020A	MS
Arsenic	10.0	10.1	101	ug/L	SW-846 6020A	MS
Barium	10.0	9.50	95	ug/L	SW-846 6020A	MS
Beryllium	10.0	9.81	98	ug/L	SW-846 6020A	MS
Cadmium	10.0	9.86	99	ug/L	SW-846 6020A	MS
Calcium	5000	4880	98	ug/L	SW-846 6020A	MS
Chromium	10.0	10.0	100	ug/L	SW-846 6020A	MS
Cobalt	10.0	10.2	102	ug/L	SW-846 6020A	MS
Copper	10.0	10.1	101	ug/L	SW-846 6020A	MS
Iron	1000	995	100	ug/L	SW-846 6020A	MS
Lead	10.0	9.73	97	ug/L	SW-846 6020A	MS
Magnesium	1000	953	95	ug/L	SW-846 6020A	MS
Manganese	50.0	49.3	99	ug/L	SW-846 6020A	MS
Molybdenum	10.0	9.64	96	ug/L	SW-846 6020A	MS
Nickel	20.0	20.3	101	ug/L	SW-846 6020A	MS
Potassium	1000	972	97	ug/L	SW-846 6020A	MS
Selenium	10.0	9.62	96	ug/L	SW-846 6020A	MS
Silver	10.0	10.2	102	ug/L	SW-846 6020A	MS
Sodium	1000	984	98	ug/L	SW-846 6020A	MS
Thallium	10.0	9.20	92	ug/L	SW-846 6020A	MS
Titanium	10.0	9.82	98	ug/L	SW-846 6020A	MS
Vanadium	10.0	10.1	101	ug/L	SW-846 6020A	MS
Zinc	200	202	101	ug/L	SW-846 6020A	MS

CCV CONTROL LIMITS EPA 6010/6020A/200.7/200.8 = 90-110, EPA 7470/7471/7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-93-8 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 7

Date Analyzed: 11/03/14 Time: 2145

LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	20.0	18.8	94	ug/L	SW-846 6020A	MS
Antimony	2.00	1.81	90	ug/L	SW-846 6020A	MS
Arsenic	1.00	1.02	102	ug/L	SW-846 6020A	MS
Barium	1.00	0.900	90	ug/L	SW-846 6020A	MS
Beryllium	1.00	0.940	94	ug/L	SW-846 6020A	MS
Cadmium	1.00	0.960	96	ug/L	SW-846 6020A	MS
Calcium	500	487	97	ug/L	SW-846 6020A	MS
Chromium	1.00	1.00	100	ug/L	SW-846 6020A	MS
Cobalt	1.00	1.03	103	ug/L	SW-846 6020A	MS
Copper	1.00	1.00	100	ug/L	SW-846 6020A	MS
Iron	100	102	102	ug/L	SW-846 6020A	MS
Lead	1.00	0.950	95	ug/L	SW-846 6020A	MS
Magnesium	100	93.5	94	ug/L	SW-846 6020A	MS
Manganese	5.00	5.09	102	ug/L	SW-846 6020A	MS
Molybdenum	1.00	0.900	90	ug/L	SW-846 6020A	MS
Nickel	2.00	2.03	102	ug/L	SW-846 6020A	MS
Potassium	100	95.4	95	ug/L	SW-846 6020A	MS
Selenium	1.00	1.02	102	ug/L	SW-846 6020A	MS
Silver	1.00	0.980	98	ug/L	SW-846 6020A	MS
Sodium	100	96.2	96	ug/L	SW-846 6020A	MS
Thallium	1.00	0.900	90	ug/L	SW-846 6020A	MS
Titanium	1.00	0.920	92	ug/L	SW-846 6020A	MS
Vanadium	1.00	0.950	95	ug/L	SW-846 6020A	MS
Zinc	20.0	20.5	103	ug/L	SW-846 6020A	MS

LLCCV CONTROL LIMITS EPA 6020A/EPA 200.8 = 70-130

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-93-8 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 7

Date Analyzed: 11/03/14 Time: 2153

CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	200	187	94	ug/L	SW-846 6020A	MS
Antimony	20.0	19.1	95	ug/L	SW-846 6020A	MS
Arsenic	10.0	10.2	102	ug/L	SW-846 6020A	MS
Barium	10.0	9.66	97	ug/L	SW-846 6020A	MS
Beryllium	10.0	9.45	94	ug/L	SW-846 6020A	MS
Cadmium	10.0	9.59	96	ug/L	SW-846 6020A	MS
Calcium	5000	4950	99	ug/L	SW-846 6020A	MS
Chromium	10.0	10.0	100	ug/L	SW-846 6020A	MS
Cobalt	10.0	10.2	102	ug/L	SW-846 6020A	MS
Copper	10.0	10.3	103	ug/L	SW-846 6020A	MS
Iron	1000	1000	100	ug/L	SW-846 6020A	MS
Lead	10.0	9.48	95	ug/L	SW-846 6020A	MS
Magnesium	1000	942	94	ug/L	SW-846 6020A	MS
Manganese	50.0	50.2	100	ug/L	SW-846 6020A	MS
Molybdenum	10.0	9.29	93	ug/L	SW-846 6020A	MS
Nickel	20.0	20.3	102	ug/L	SW-846 6020A	MS
Potassium	1000	967	97	ug/L	SW-846 6020A	MS
Selenium	10.0	9.63	96	ug/L	SW-846 6020A	MS
Silver	10.0	9.89	99	ug/L	SW-846 6020A	MS
Sodium	1000	957	96	ug/L	SW-846 6020A	MS
Thallium	10.0	9.06	91	ug/L	SW-846 6020A	MS
Titanium	10.0	10.1	101	ug/L	SW-846 6020A	MS
Vanadium	10.0	9.91	99	ug/L	SW-846 6020A	MS
Zinc	200	208	104	ug/L	SW-846 6020A	MS

CCV CONTROL LIMITS EPA 6010/6020A/200.7/200.8 = 90-110, EPA 7470/7471/7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-93-8 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 7

Date Analyzed: 11/03/14 Time: 2321

LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Vanadium	1.00	1.04	104	ug/L	SW-846 6020A	MS
Zinc	20.0	20.1	100	ug/L	SW-846 6020A	MS
Aluminum	20.0	19.2	96	ug/L	SW-846 6020A	MS
Antimony	2.00	1.82	91	ug/L	SW-846 6020A	MS
Arsenic	1.00	1.02	102	ug/L	SW-846 6020A	MS
Barium	1.00	1.03	103	ug/L	SW-846 6020A	MS
Beryllium	1.00	0.820	82	ug/L	SW-846 6020A	MS
Cadmium	1.00	0.970	97	ug/L	SW-846 6020A	MS
Calcium	500	493	99	ug/L	SW-846 6020A	MS
Chromium	1.00	0.980	98	ug/L	SW-846 6020A	MS
Cobalt	1.00	1.00	100	ug/L	SW-846 6020A	MS
Copper	1.00	1.07	107	ug/L	SW-846 6020A	MS
Iron	100	98.4	98	ug/L	SW-846 6020A	MS
Lead	1.00	0.930	93	ug/L	SW-846 6020A	MS
Magnesium	100	94.3	94	ug/L	SW-846 6020A	MS
Manganese	5.00	4.94	99	ug/L	SW-846 6020A	MS
Molybdenum	1.00	0.950	95	ug/L	SW-846 6020A	MS
Nickel	2.00	2.02	101	ug/L	SW-846 6020A	MS
Potassium	100	96.6	97	ug/L	SW-846 6020A	MS
Selenium	1.00	1.06	106	ug/L	SW-846 6020A	MS
Silver	1.00	0.960	96	ug/L	SW-846 6020A	MS
Sodium	100	117	117	ug/L	SW-846 6020A	MS
Thallium	1.00	0.870	87	ug/L	SW-846 6020A	MS
Titanium	1.00	1.02	102	ug/L	SW-846 6020A	MS

LLCCV CONTROL LIMITS EPA 6020A/EPA 200.8 = 70-130

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-93-8 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 7

Date Analyzed: 11/03/14 Time: 2329

CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	200	184	92	ug/L	SW-846 6020A	MS
Antimony	20.0	19.3	97	ug/L	SW-846 6020A	MS
Arsenic	10.0	10.1	101	ug/L	SW-846 6020A	MS
Barium	10.0	9.86	99	ug/L	SW-846 6020A	MS
Beryllium	10.0	9.02	90	ug/L	SW-846 6020A	MS
Cadmium	10.0	9.78	98	ug/L	SW-846 6020A	MS
Calcium	5000	4870	97	ug/L	SW-846 6020A	MS
Chromium	10.0	9.86	99	ug/L	SW-846 6020A	MS
Cobalt	10.0	10.2	102	ug/L	SW-846 6020A	MS
Copper	10.0	10.1	101	ug/L	SW-846 6020A	MS
Iron	1000	995	100	ug/L	SW-846 6020A	MS
Lead	10.0	9.36	94	ug/L	SW-846 6020A	MS
Magnesium	1000	925	93	ug/L	SW-846 6020A	MS
Manganese	50.0	49.7	99	ug/L	SW-846 6020A	MS
Molybdenum	10.0	9.45	95	ug/L	SW-846 6020A	MS
Nickel	20.0	19.9	100	ug/L	SW-846 6020A	MS
Potassium	1000	963	96	ug/L	SW-846 6020A	MS
Selenium	10.0	9.60	96	ug/L	SW-846 6020A	MS
Silver	10.0	9.74	97	ug/L	SW-846 6020A	MS
Sodium	1000	949	95	ug/L	SW-846 6020A	MS
Thallium	10.0	8.97	90	ug/L	SW-846 6020A	MS
Titanium	10.0	9.82	98	ug/L	SW-846 6020A	MS
Vanadium	10.0	9.97	100	ug/L	SW-846 6020A	MS
Zinc	200	201	100	ug/L	SW-846 6020A	MS

CCV CONTROL LIMITS EPA 6010/6020A/200.7/200.8 = 90-110, EPA 7470/7471/7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-93-8 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 7

Date Analyzed: 11/04/14 Time: 0057

LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Aluminum	20.0	19.1	96	ug/L	SW-846 6020A	MS
Antimony	2.00	2.06	103	ug/L	SW-846 6020A	MS
Arsenic	1.00	1.05	105	ug/L	SW-846 6020A	MS
Barium	1.00	1.04	104	ug/L	SW-846 6020A	MS
Beryllium	1.00	0.890	89	ug/L	SW-846 6020A	MS
Cadmium	1.00	1.00	100	ug/L	SW-846 6020A	MS
Calcium	500	503	101	ug/L	SW-846 6020A	MS
Chromium	1.00	1.01	101	ug/L	SW-846 6020A	MS
Cobalt	1.00	1.05	105	ug/L	SW-846 6020A	MS
Copper	1.00	1.10	110	ug/L	SW-846 6020A	MS
Iron	100	97.6	98	ug/L	SW-846 6020A	MS
Lead	1.00	0.940	94	ug/L	SW-846 6020A	MS
Magnesium	100	92.6	93	ug/L	SW-846 6020A	MS
Manganese	5.00	5.10	102	ug/L	SW-846 6020A	MS
Molybdenum	1.00	0.930	93	ug/L	SW-846 6020A	MS
Nickel	2.00	2.07	104	ug/L	SW-846 6020A	MS
Potassium	100	95.8	96	ug/L	SW-846 6020A	MS
Selenium	1.00	1.14	114	ug/L	SW-846 6020A	MS
Silver	1.00	0.960	96	ug/L	SW-846 6020A	MS
Sodium	100	113	113	ug/L	SW-846 6020A	MS
Thallium	1.00	0.930	93	ug/L	SW-846 6020A	MS
Titanium	1.00	1.05	105	ug/L	SW-846 6020A	MS
Vanadium	1.00	1.02	102	ug/L	SW-846 6020A	MS
Zinc	20.0	20.7	104	ug/L	SW-846 6020A	MS

LLCCV CONTROL LIMITS EPA 6020A/EPA 200.8 = 70-130

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-93-8 Absolute Standards Instrument ID: ICPMS1 ICAL ID: 7

Date Analyzed: 11/04/14 Time: 0105

CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	200	183	92	ug/L	SW-846 6020A	MS
Antimony	20.0	19.4	97	ug/L	SW-846 6020A	MS
Arsenic	10.0	10.2	102	ug/L	SW-846 6020A	MS
Barium	10.0	9.97	100	ug/L	SW-846 6020A	MS
Beryllium	10.0	8.72	87	ug/L	SW-846 6020A	MS
Cadmium	10.0	9.60	96	ug/L	SW-846 6020A	MS
Calcium	5000	4880	98	ug/L	SW-846 6020A	MS
Chromium	10.0	9.74	97	ug/L	SW-846 6020A	MS
Cobalt	10.0	10.1	101	ug/L	SW-846 6020A	MS
Copper	10.0	9.96	100	ug/L	SW-846 6020A	MS
Iron	1000	976	98	ug/L	SW-846 6020A	MS
Lead	10.0	9.37	94	ug/L	SW-846 6020A	MS
Magnesium	1000	905	90	ug/L	SW-846 6020A	MS
Manganese	50.0	49.4	99	ug/L	SW-846 6020A	MS
Molybdenum	10.0	9.28	93	ug/L	SW-846 6020A	MS
Nickel	20.0	19.9	99	ug/L	SW-846 6020A	MS
Potassium	1000	952	95	ug/L	SW-846 6020A	MS
Selenium	10.0	9.76	98	ug/L	SW-846 6020A	MS
Silver	10.0	9.62	96	ug/L	SW-846 6020A	MS
Sodium	1000	931	93	ug/L	SW-846 6020A	MS
Thallium	10.0	8.90	89	ug/L	SW-846 6020A	MS
Titanium	10.0	9.40	94	ug/L	SW-846 6020A	MS
Vanadium	10.0	9.88	99	ug/L	SW-846 6020A	MS
Zinc	200	199	100	ug/L	SW-846 6020A	MS

CCV CONTROL LIMITS EPA 6010/6020A/200.7/200.8 = 90-110, EPA 7470/7471/7XXX = 80-120

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-93-9 CPI Instrument ID: ICPMS2 ICAL ID: 8

Date Analyzed: 11/03/14 Time: 1033

INITIAL CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Aluminum	1000	1020	102	ug/L	SW-846 6020A	MS
Antimony	50.0	50.3	101	ug/L	SW-846 6020A	MS
Arsenic	50.0	50.1	100	ug/L	SW-846 6020A	MS
Barium	50.0	50.2	100	ug/L	SW-846 6020A	MS
Beryllium	50.0	52.6	105	ug/L	SW-846 6020A	MS
Cadmium	50.0	51.2	102	ug/L	SW-846 6020A	MS
Calcium	25000	25500	102	ug/L	SW-846 6020A	MS
Chromium	50.0	51.8	104	ug/L	SW-846 6020A	MS
Cobalt	50.0	51.5	103	ug/L	SW-846 6020A	MS
Copper	50.0	52.7	105	ug/L	SW-846 6020A	MS
Iron	5000	5130	103	ug/L	SW-846 6020A	MS
Lead	50.0	49.7	99	ug/L	SW-846 6020A	MS
Magnesium	5000	5270	105	ug/L	SW-846 6020A	MS
Manganese	50.0	48.4	97	ug/L	SW-846 6020A	MS
Molybdenum	50.0	50.1	100	ug/L	SW-846 6020A	MS
Nickel	100	105	105	ug/L	SW-846 6020A	MS
Potassium	5000	5150	103	ug/L	SW-846 6020A	MS
Selenium	25.0	24.9	99	ug/L	SW-846 6020A	MS
Silver	50.0	48.6	97	ug/L	SW-846 6020A	MS
Sodium	5000	5140	103	ug/L	SW-846 6020A	MS
Thallium	50.0	49.5	99	ug/L	SW-846 6020A	MS
Titanium	50.0	51.0	102	ug/L	SW-846 6020A	MS
Vanadium	50.0	50.9	102	ug/L	SW-846 6020A	MS
Zinc	1000	1040	104	ug/L	SW-846 6020A	MS

ICV CONTROL LIMITS EPA 6010/6020/200.8 = 90-110 EPA 200.7 = 95-105

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-93-8 Absolute Standards Instrument ID: ICPMS2 ICAL ID: 8

Date Analyzed: 11/03/14 Time: 1038

LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Cadmium	1.00	0.990	99	ug/L	SW-846 6020A	MS
Calcium	500	509	102	ug/L	SW-846 6020A	MS
Chromium	1.00	1.03	103	ug/L	SW-846 6020A	MS
Cobalt	1.00	1.07	107	ug/L	SW-846 6020A	MS
Copper	1.00	1.09	109	ug/L	SW-846 6020A	MS
Iron	100	102	102	ug/L	SW-846 6020A	MS
Lead	1.00	1.01	101	ug/L	SW-846 6020A	MS
Magnesium	100	105	105	ug/L	SW-846 6020A	MS
Manganese	5.00	4.99	100	ug/L	SW-846 6020A	MS
Molybdenum	1.00	0.990	99	ug/L	SW-846 6020A	MS
Nickel	2.00	2.23	112	ug/L	SW-846 6020A	MS
Potassium	100	96.2	96	ug/L	SW-846 6020A	MS
Selenium	1.00	0.930	93	ug/L	SW-846 6020A	MS
Silver	1.00	1.00	100	ug/L	SW-846 6020A	MS
Sodium	100	107	107	ug/L	SW-846 6020A	MS
Thallium	1.00	0.980	98	ug/L	SW-846 6020A	MS
Titanium	1.00	1.04	104	ug/L	SW-846 6020A	MS
Vanadium	1.00	1.03	103	ug/L	SW-846 6020A	MS
Zinc	20.0	19.1	96	ug/L	SW-846 6020A	MS
Aluminum	20.0	20.9	104	ug/L	SW-846 6020A	MS
Antimony	2.00	2.05	102	ug/L	SW-846 6020A	MS
Arsenic	1.00	1.03	103	ug/L	SW-846 6020A	MS
Barium	1.00	1.00	100	ug/L	SW-846 6020A	MS
Beryllium	1.00	1.06	106	ug/L	SW-846 6020A	MS

LLCCV CONTROL LIMITS EPA 6020A/EPA 200.8 = 70-130

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-93-8 Absolute Standards Instrument ID: ICPMS2 ICAL ID: 8

Date Analyzed: 11/03/14 Time: 2041

LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	20.0	20.8	104	ug/L	SW-846 6020A	MS
Antimony	2.00	2.04	102	ug/L	SW-846 6020A	MS
Arsenic	1.00	0.990	99	ug/L	SW-846 6020A	MS
Barium	1.00	1.02	102	ug/L	SW-846 6020A	MS
Beryllium	1.00	1.02	102	ug/L	SW-846 6020A	MS
Cadmium	1.00	0.990	99	ug/L	SW-846 6020A	MS
Calcium	500	510	102	ug/L	SW-846 6020A	MS
Chromium	1.00	0.930	93	ug/L	SW-846 6020A	MS
Cobalt	1.00	1.02	102	ug/L	SW-846 6020A	MS
Copper	1.00	1.05	105	ug/L	SW-846 6020A	MS
Iron	100	98.6	99	ug/L	SW-846 6020A	MS
Lead	1.00	1.00	100	ug/L	SW-846 6020A	MS
Magnesium	100	104	104	ug/L	SW-846 6020A	MS
Manganese	5.00	4.92	98	ug/L	SW-846 6020A	MS
Molybdenum	1.00	0.950	95	ug/L	SW-846 6020A	MS
Nickel	2.00	2.07	104	ug/L	SW-846 6020A	MS
Potassium	100	83.2	83	ug/L	SW-846 6020A	MS
Selenium	1.00	0.920	92	ug/L	SW-846 6020A	MS
Silver	1.00	0.970	97	ug/L	SW-846 6020A	MS
Sodium	100	101	101	ug/L	SW-846 6020A	MS
Thallium	1.00	0.970	97	ug/L	SW-846 6020A	MS
Titanium	1.00	0.930	93	ug/L	SW-846 6020A	MS
Vanadium	1.00	0.970	97	ug/L	SW-846 6020A	MS
Zinc	20.0	19.1	95	ug/L	SW-846 6020A	MS

LLCCV CONTROL LIMITS EPA 6020A/EPA 200.8 = 70-130

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-93-8 Absolute Standards Instrument ID: ICPMS2 ICAL ID: 8

Date Analyzed: 11/03/14 Time: 2043

CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	200	204	102	ug/L	SW-846 6020A	MS
Antimony	20.0	19.8	99	ug/L	SW-846 6020A	MS
Arsenic	10.0	9.91	99	ug/L	SW-846 6020A	MS
Barium	10.0	9.97	100	ug/L	SW-846 6020A	MS
Beryllium	10.0	10.3	103	ug/L	SW-846 6020A	MS
Cadmium	10.0	9.73	97	ug/L	SW-846 6020A	MS
Calcium	5000	5120	102	ug/L	SW-846 6020A	MS
Chromium	10.0	9.89	99	ug/L	SW-846 6020A	MS
Cobalt	10.0	10.1	101	ug/L	SW-846 6020A	MS
Copper	10.0	10.2	102	ug/L	SW-846 6020A	MS
Iron	1000	999	100	ug/L	SW-846 6020A	MS
Lead	10.0	9.80	98	ug/L	SW-846 6020A	MS
Magnesium	1000	1030	103	ug/L	SW-846 6020A	MS
Manganese	50.0	48.5	97	ug/L	SW-846 6020A	MS
Molybdenum	10.0	9.40	94	ug/L	SW-846 6020A	MS
Nickel	20.0	20.3	101	ug/L	SW-846 6020A	MS
Potassium	1000	983	98	ug/L	SW-846 6020A	MS
Selenium	10.0	9.53	95	ug/L	SW-846 6020A	MS
Silver	10.0	9.67	97	ug/L	SW-846 6020A	MS
Sodium	1000	1020	102	ug/L	SW-846 6020A	MS
Thallium	10.0	9.74	97	ug/L	SW-846 6020A	MS
Titanium	10.0	10.0	100	ug/L	SW-846 6020A	MS
Vanadium	10.0	9.87	99	ug/L	SW-846 6020A	MS
Zinc	200	197	99	ug/L	SW-846 6020A	MS

CCV CONTROL LIMITS EPA 6010/6020A/200.7/200.8 = 90-110, EPA 7470/7471/7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-93-8 Absolute Standards Instrument ID: ICPMS2 ICAL ID: 8

Date Analyzed: 11/03/14 Time: 2102

LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Selenium	1.00	0.940	94	ug/L	SW-846 6020A	MS
Silver	1.00	0.980	98	ug/L	SW-846 6020A	MS
Sodium	100	135	135	ug/L	SW-846 6020A	MS
Thallium	1.00	0.970	97	ug/L	SW-846 6020A	MS
Titanium	1.00	0.990	99	ug/L	SW-846 6020A	MS
Vanadium	1.00	1.01	101	ug/L	SW-846 6020A	MS
Zinc	20.0	19.1	96	ug/L	SW-846 6020A	MS
Aluminum	20.0	20.6	103	ug/L	SW-846 6020A	MS
Antimony	2.00	2.04	102	ug/L	SW-846 6020A	MS
Arsenic	1.00	1.02	102	ug/L	SW-846 6020A	MS
Barium	1.00	1.04	104	ug/L	SW-846 6020A	MS
Beryllium	1.00	1.08	108	ug/L	SW-846 6020A	MS
Cadmium	1.00	1.00	100	ug/L	SW-846 6020A	MS
Calcium	500	511	102	ug/L	SW-846 6020A	MS
Chromium	1.00	0.890	89	ug/L	SW-846 6020A	MS
Cobalt	1.00	1.01	101	ug/L	SW-846 6020A	MS
Copper	1.00	1.08	108	ug/L	SW-846 6020A	MS
Iron	100	99.5	99	ug/L	SW-846 6020A	MS
Lead	1.00	0.980	98	ug/L	SW-846 6020A	MS
Magnesium	100	107	107	ug/L	SW-846 6020A	MS
Manganese	5.00	4.95	99	ug/L	SW-846 6020A	MS
Molybdenum	1.00	0.950	95	ug/L	SW-846 6020A	MS
Nickel	2.00	2.02	101	ug/L	SW-846 6020A	MS
Potassium	100	88.4	88	ug/L	SW-846 6020A	MS

LLCCV CONTROL LIMITS EPA 6020A/EPA 200.8 = 70-130

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-93-8 Absolute Standards Instrument ID: ICPMS2 ICAL ID: 8

Date Analyzed: 11/03/14 Time: 2105

CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	200	199	99	ug/L	SW-846 6020A	MS
Antimony	20.0	20.2	101	ug/L	SW-846 6020A	MS
Arsenic	10.0	9.63	96	ug/L	SW-846 6020A	MS
Barium	10.0	10.1	101	ug/L	SW-846 6020A	MS
Beryllium	10.0	10.8	108	ug/L	SW-846 6020A	MS
Cadmium	10.0	9.78	98	ug/L	SW-846 6020A	MS
Calcium	5000	5020	100	ug/L	SW-846 6020A	MS
Chromium	10.0	9.37	94	ug/L	SW-846 6020A	MS
Cobalt	10.0	9.74	97	ug/L	SW-846 6020A	MS
Copper	10.0	11.6	116	ug/L	SW-846 6020A	MS
Iron	1000	949	95	ug/L	SW-846 6020A	MS
Lead	10.0	9.77	98	ug/L	SW-846 6020A	MS
Magnesium	1000	1010	101	ug/L	SW-846 6020A	MS
Manganese	50.0	46.9	94	ug/L	SW-846 6020A	MS
Molybdenum	10.0	9.45	94	ug/L	SW-846 6020A	MS
Nickel	20.0	19.6	98	ug/L	SW-846 6020A	MS
Potassium	1000	969	97	ug/L	SW-846 6020A	MS
Selenium	10.0	9.31	93	ug/L	SW-846 6020A	MS
Silver	10.0	9.68	97	ug/L	SW-846 6020A	MS
Sodium	1000	1020	102	ug/L	SW-846 6020A	MS
Thallium	10.0	9.62	96	ug/L	SW-846 6020A	MS
Titanium	10.0	9.34	93	ug/L	SW-846 6020A	MS
Vanadium	10.0	9.43	94	ug/L	SW-846 6020A	MS
Zinc	200	190	95	ug/L	SW-846 6020A	MS

CCV CONTROL LIMITS EPA 6010/6020A/200.7/200.8 = 90-110, EPA 7470/7471/7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-93-9 CPI Instrument ID: ICPMS2 ICAL ID: 10

Date Analyzed: 11/06/14 Time: 1105

INITIAL CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Aluminum	1000	1010	101	ug/L	SW-846 6020A	MS
Antimony	50.0	48.4	97	ug/L	SW-846 6020A	MS
Arsenic	50.0	49.5	99	ug/L	SW-846 6020A	MS
Barium	50.0	48.6	97	ug/L	SW-846 6020A	MS
Beryllium	50.0	50.3	101	ug/L	SW-846 6020A	MS
Cadmium	50.0	49.8	100	ug/L	SW-846 6020A	MS
Calcium	25000	25100	100	ug/L	SW-846 6020A	MS
Chromium	50.0	50.0	100	ug/L	SW-846 6020A	MS
Cobalt	50.0	50.2	100	ug/L	SW-846 6020A	MS
Copper	50.0	51.4	103	ug/L	SW-846 6020A	MS
Iron	5000	5060	101	ug/L	SW-846 6020A	MS
Lead	50.0	50.7	101	ug/L	SW-846 6020A	MS
Magnesium	5000	5200	104	ug/L	SW-846 6020A	MS
Manganese	50.0	46.8	94	ug/L	SW-846 6020A	MS
Molybdenum	50.0	48.3	97	ug/L	SW-846 6020A	MS
Nickel	100	100	100	ug/L	SW-846 6020A	MS
Potassium	5000	5130	103	ug/L	SW-846 6020A	MS
Selenium	25.0	23.8	95	ug/L	SW-846 6020A	MS
Silver	50.0	47.5	95	ug/L	SW-846 6020A	MS
Sodium	5000	5060	101	ug/L	SW-846 6020A	MS
Thallium	50.0	51.6	103	ug/L	SW-846 6020A	MS
Titanium	50.0	49.6	99	ug/L	SW-846 6020A	MS
Vanadium	50.0	49.3	99	ug/L	SW-846 6020A	MS
Zinc	1000	998	100	ug/L	SW-846 6020A	MS

ICV CONTROL LIMITS EPA 6010/6020/200.8 = 90-110 EPA 200.7 = 95-105

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-93-8 Absolute Standards Instrument ID: ICPMS2 ICAL ID: 10

Date Analyzed: 11/06/14 Time: 1110

LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Aluminum	20.0	19.6	98	ug/L	SW-846 6020A	MS
Antimony	2.00	1.95	98	ug/L	SW-846 6020A	MS
Arsenic	1.00	0.990	99	ug/L	SW-846 6020A	MS
Barium	1.00	0.960	96	ug/L	SW-846 6020A	MS
Beryllium	1.00	1.01	101	ug/L	SW-846 6020A	MS
Cadmium	1.00	0.960	96	ug/L	SW-846 6020A	MS
Calcium	500	465	93	ug/L	SW-846 6020A	MS
Chromium	1.00	1.02	102	ug/L	SW-846 6020A	MS
Cobalt	1.00	1.01	101	ug/L	SW-846 6020A	MS
Copper	1.00	1.04	104	ug/L	SW-846 6020A	MS
Iron	100	99.6	100	ug/L	SW-846 6020A	MS
Lead	1.00	0.980	98	ug/L	SW-846 6020A	MS
Magnesium	100	100	100	ug/L	SW-846 6020A	MS
Manganese	5.00	4.71	94	ug/L	SW-846 6020A	MS
Molybdenum	1.00	0.940	94	ug/L	SW-846 6020A	MS
Nickel	2.00	2.09	105	ug/L	SW-846 6020A	MS
Potassium	100	91.5	92	ug/L	SW-846 6020A	MS
Selenium	1.00	1.04	104	ug/L	SW-846 6020A	MS
Silver	1.00	0.980	98	ug/L	SW-846 6020A	MS
Sodium	100	100	100	ug/L	SW-846 6020A	MS
Thallium	1.00	0.980	98	ug/L	SW-846 6020A	MS
Titanium	1.00	0.990	99	ug/L	SW-846 6020A	MS
Vanadium	1.00	0.970	97	ug/L	SW-846 6020A	MS
Zinc	20.0	19.6	98	ug/L	SW-846 6020A	MS

LLCCV CONTROL LIMITS EPA 6020A/EPA 200.8 = 70-130

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-93-8 Absolute Standards Instrument ID: ICPMS2 ICAL ID: 10

Date Analyzed: 11/06/14 Time: 1503

LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	20.0	21.1	105	ug/L	SW-846 6020A	MS
Antimony	2.00	1.96	98	ug/L	SW-846 6020A	MS
Arsenic	1.00	1.00	100	ug/L	SW-846 6020A	MS
Barium	1.00	0.990	99	ug/L	SW-846 6020A	MS
Beryllium	1.00	0.930	93	ug/L	SW-846 6020A	MS
Cadmium	1.00	0.960	96	ug/L	SW-846 6020A	MS
Calcium	500	493	99	ug/L	SW-846 6020A	MS
Chromium	1.00	0.990	99	ug/L	SW-846 6020A	MS
Cobalt	1.00	1.05	105	ug/L	SW-846 6020A	MS
Copper	1.00	1.08	108	ug/L	SW-846 6020A	MS
Iron	100	101	101	ug/L	SW-846 6020A	MS
Lead	1.00	1.00	100	ug/L	SW-846 6020A	MS
Magnesium	100	102	102	ug/L	SW-846 6020A	MS
Manganese	5.00	4.77	95	ug/L	SW-846 6020A	MS
Molybdenum	1.00	0.970	97	ug/L	SW-846 6020A	MS
Nickel	2.00	2.09	104	ug/L	SW-846 6020A	MS
Potassium	100	90.5	90	ug/L	SW-846 6020A	MS
Selenium	1.00	1.04	104	ug/L	SW-846 6020A	MS
Silver	1.00	0.990	99	ug/L	SW-846 6020A	MS
Sodium	100	103	103	ug/L	SW-846 6020A	MS
Thallium	1.00	0.980	98	ug/L	SW-846 6020A	MS
Titanium	1.00	0.980	98	ug/L	SW-846 6020A	MS
Vanadium	1.00	0.970	97	ug/L	SW-846 6020A	MS
Zinc	20.0	19.8	99	ug/L	SW-846 6020A	MS

LLCCV CONTROL LIMITS EPA 6020A/EPA 200.8 = 70-130

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-93-8 Absolute Standards Instrument ID: ICPMS2 ICAL ID: 10

Date Analyzed: 11/06/14 Time: 1506

CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	200	202	101	ug/L	SW-846 6020A	MS
Antimony	20.0	19.8	99	ug/L	SW-846 6020A	MS
Arsenic	10.0	10.0	100	ug/L	SW-846 6020A	MS
Barium	10.0	9.81	98	ug/L	SW-846 6020A	MS
Beryllium	10.0	9.86	99	ug/L	SW-846 6020A	MS
Cadmium	10.0	9.89	99	ug/L	SW-846 6020A	MS
Calcium	5000	5020	100	ug/L	SW-846 6020A	MS
Chromium	10.0	10.0	100	ug/L	SW-846 6020A	MS
Cobalt	10.0	10.4	104	ug/L	SW-846 6020A	MS
Copper	10.0	10.5	105	ug/L	SW-846 6020A	MS
Iron	1000	1020	102	ug/L	SW-846 6020A	MS
Lead	10.0	10.0	100	ug/L	SW-846 6020A	MS
Magnesium	1000	1020	102	ug/L	SW-846 6020A	MS
Manganese	50.0	48.8	98	ug/L	SW-846 6020A	MS
Molybdenum	10.0	9.74	97	ug/L	SW-846 6020A	MS
Nickel	20.0	20.6	103	ug/L	SW-846 6020A	MS
Potassium	1000	978	98	ug/L	SW-846 6020A	MS
Selenium	10.0	9.90	99	ug/L	SW-846 6020A	MS
Silver	10.0	9.99	100	ug/L	SW-846 6020A	MS
Sodium	1000	1020	102	ug/L	SW-846 6020A	MS
Thallium	10.0	10.1	101	ug/L	SW-846 6020A	MS
Titanium	10.0	9.67	97	ug/L	SW-846 6020A	MS
Vanadium	10.0	9.94	99	ug/L	SW-846 6020A	MS
Zinc	200	201	100	ug/L	SW-846 6020A	MS

CCV CONTROL LIMITS EPA 6010/6020A/200.7/200.8 = 90-110, EPA 7470/7471/7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-93-8 Absolute Standards Instrument ID: ICPMS2 ICAL ID: 10

Date Analyzed: 11/06/14 Time: 1536

LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Aluminum	20.0	20.3	102	ug/L	SW-846 6020A	MS
Antimony	2.00	1.98	99	ug/L	SW-846 6020A	MS
Arsenic	1.00	0.980	98	ug/L	SW-846 6020A	MS
Barium	1.00	0.990	99	ug/L	SW-846 6020A	MS
Beryllium	1.00	0.970	97	ug/L	SW-846 6020A	MS
Cadmium	1.00	0.970	97	ug/L	SW-846 6020A	MS
Calcium	500	495	99	ug/L	SW-846 6020A	MS
Chromium	1.00	0.970	97	ug/L	SW-846 6020A	MS
Cobalt	1.00	1.01	101	ug/L	SW-846 6020A	MS
Copper	1.00	1.09	109	ug/L	SW-846 6020A	MS
Iron	100	100	100	ug/L	SW-846 6020A	MS
Lead	1.00	0.980	98	ug/L	SW-846 6020A	MS
Magnesium	100	101	101	ug/L	SW-846 6020A	MS
Manganese	5.00	4.69	94	ug/L	SW-846 6020A	MS
Molybdenum	1.00	0.970	97	ug/L	SW-846 6020A	MS
Nickel	2.00	2.01	101	ug/L	SW-846 6020A	MS
Potassium	100	87.4	87	ug/L	SW-846 6020A	MS
Selenium	1.00	1.02	102	ug/L	SW-846 6020A	MS
Silver	1.00	0.980	98	ug/L	SW-846 6020A	MS
Sodium	100	106	106	ug/L	SW-846 6020A	MS
Thallium	1.00	0.980	98	ug/L	SW-846 6020A	MS
Titanium	1.00	1.05	105	ug/L	SW-846 6020A	MS
Vanadium	1.00	0.950	95	ug/L	SW-846 6020A	MS
Zinc	20.0	19.9	99	ug/L	SW-846 6020A	MS

LLCCV CONTROL LIMITS EPA 6020A/EPA 200.8 = 70-130

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-93-8 Absolute Standards Instrument ID: ICPMS2 ICAL ID: 10

Date Analyzed: 11/06/14 Time: 1538

CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Zinc	200	200	100	ug/L	SW-846 6020A	MS
Aluminum	200	200	100	ug/L	SW-846 6020A	MS
Antimony	20.0	19.9	99	ug/L	SW-846 6020A	MS
Arsenic	10.0	9.97	100	ug/L	SW-846 6020A	MS
Barium	10.0	9.79	98	ug/L	SW-846 6020A	MS
Beryllium	10.0	9.90	99	ug/L	SW-846 6020A	MS
Cadmium	10.0	9.88	99	ug/L	SW-846 6020A	MS
Calcium	5000	4980	100	ug/L	SW-846 6020A	MS
Chromium	10.0	9.92	99	ug/L	SW-846 6020A	MS
Cobalt	10.0	10.4	104	ug/L	SW-846 6020A	MS
Copper	10.0	10.6	106	ug/L	SW-846 6020A	MS
Iron	1000	1010	101	ug/L	SW-846 6020A	MS
Lead	10.0	10.0	100	ug/L	SW-846 6020A	MS
Magnesium	1000	1030	103	ug/L	SW-846 6020A	MS
Manganese	50.0	48.6	97	ug/L	SW-846 6020A	MS
Molybdenum	10.0	9.57	96	ug/L	SW-846 6020A	MS
Nickel	20.0	20.7	104	ug/L	SW-846 6020A	MS
Potassium	1000	964	96	ug/L	SW-846 6020A	MS
Selenium	10.0	10.0	100	ug/L	SW-846 6020A	MS
Silver	10.0	9.89	99	ug/L	SW-846 6020A	MS
Sodium	1000	1030	103	ug/L	SW-846 6020A	MS
Thallium	10.0	10.1	101	ug/L	SW-846 6020A	MS
Titanium	10.0	9.79	98	ug/L	SW-846 6020A	MS
Vanadium	10.0	9.74	97	ug/L	SW-846 6020A	MS

CCV CONTROL LIMITS EPA 6010/6020A/200.7/200.8 = 90-110, EPA 7470/7471/7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-88-4 CPI Instrument ID: ICPMS2 ICAL ID: 13

Date Analyzed: 10/23/14 Time: 0939

INITIAL CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Aluminum	1000	956	96	ug/L	SW-846 6020A Dissolved	MS
Antimony	50.0	48.9	98	ug/L	SW-846 6020A Dissolved	MS
Arsenic	50.0	46.7	93	ug/L	SW-846 6020A Dissolved	MS
Barium	50.0	48.6	97	ug/L	SW-846 6020A Dissolved	MS
Beryllium	50.0	46.2	92	ug/L	SW-846 6020A Dissolved	MS
Cadmium	50.0	48.9	98	ug/L	SW-846 6020A Dissolved	MS
Calcium	25000	24200	97	ug/L	SW-846 6020A Dissolved	MS
Chromium	50.0	48.6	97	ug/L	SW-846 6020A Dissolved	MS
Cobalt	50.0	47.7	95	ug/L	SW-846 6020A Dissolved	MS
Copper	50.0	49.0	98	ug/L	SW-846 6020A Dissolved	MS
Iron	5000	4770	95	ug/L	SW-846 6020A Dissolved	MS
Lead	50.0	48.6	97	ug/L	SW-846 6020A Dissolved	MS
Magnesium	5000	4880	98	ug/L	SW-846 6020A Dissolved	MS
Manganese	50.0	46.6	93	ug/L	SW-846 6020A Dissolved	MS
Molybdenum	50.0	48.3	97	ug/L	SW-846 6020A Dissolved	MS
Nickel	100	97.2	97	ug/L	SW-846 6020A Dissolved	MS
Potassium	5000	4920	98	ug/L	SW-846 6020A Dissolved	MS
Selenium	25.0	24.1	97	ug/L	SW-846 6020A Dissolved	MS
Silver	50.0	48.6	97	ug/L	SW-846 6020A Dissolved	MS
Sodium	5000	4770	95	ug/L	SW-846 6020A Dissolved	MS
Thallium	50.0	48.6	97	ug/L	SW-846 6020A Dissolved	MS
Titanium	50.0	48.0	96	ug/L	SW-846 6020A Dissolved	MS
Vanadium	50.0	47.9	96	ug/L	SW-846 6020A Dissolved	MS
Zinc	1000	939	94	ug/L	SW-846 6020A Dissolved	MS

ICV CONTROL LIMITS EPA 6010/6020/200.8 = 90-110 EPA 200.7 = 95-105

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-88-3 Absolute Standards Instrument ID: ICPMS2 ICAL ID: 13

Date Analyzed: 10/23/14 Time: 0949

LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Aluminum	20.0	20.1	101	ug/L	SW-846 6020A Dissolved	MS
Antimony	2.00	1.92	96	ug/L	SW-846 6020A Dissolved	MS
Arsenic	1.00	1.01	101	ug/L	SW-846 6020A Dissolved	MS
Barium	1.00	1.05	105	ug/L	SW-846 6020A Dissolved	MS
Beryllium	1.00	0.950	95	ug/L	SW-846 6020A Dissolved	MS
Cadmium	1.00	0.950	95	ug/L	SW-846 6020A Dissolved	MS
Calcium	500	535	107	ug/L	SW-846 6020A Dissolved	MS
Chromium	1.00	1.01	101	ug/L	SW-846 6020A Dissolved	MS
Cobalt	1.00	1.02	102	ug/L	SW-846 6020A Dissolved	MS
Copper	1.00	1.08	108	ug/L	SW-846 6020A Dissolved	MS
Iron	100	101	101	ug/L	SW-846 6020A Dissolved	MS
Lead	1.00	1.02	102	ug/L	SW-846 6020A Dissolved	MS
Magnesium	100	101	101	ug/L	SW-846 6020A Dissolved	MS
Manganese	5.00	4.83	97	ug/L	SW-846 6020A Dissolved	MS
Molybdenum	1.00	1.06	106	ug/L	SW-846 6020A Dissolved	MS
Nickel	2.00	2.06	103	ug/L	SW-846 6020A Dissolved	MS
Potassium	100	103	103	ug/L	SW-846 6020A Dissolved	MS
Selenium	1.00	0.950	95	ug/L	SW-846 6020A Dissolved	MS
Silver	1.00	1.02	102	ug/L	SW-846 6020A Dissolved	MS
Sodium	100	104	104	ug/L	SW-846 6020A Dissolved	MS
Thallium	1.00	0.960	96	ug/L	SW-846 6020A Dissolved	MS
Titanium	1.00	1.25	125	ug/L	SW-846 6020A Dissolved	MS
Vanadium	1.00	1.00	100	ug/L	SW-846 6020A Dissolved	MS
Zinc	20.0	20.1	101	ug/L	SW-846 6020A Dissolved	MS

LLCCV CONTROL LIMITS EPA 6020A/EPA 200.8 = 70-130

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-88-3 Absolute Standards Instrument ID: ICPMS2 ICAL ID: 13

Date Analyzed: 10/23/14 Time: 1108

LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Aluminum	20.0	19.4	97	ug/L	SW-846 6020A Dissolved	MS
Antimony	2.00	1.83	91	ug/L	SW-846 6020A Dissolved	MS
Arsenic	1.00	1.00	100	ug/L	SW-846 6020A Dissolved	MS
Barium	1.00	0.990	99	ug/L	SW-846 6020A Dissolved	MS
Beryllium	1.00	0.890	89	ug/L	SW-846 6020A Dissolved	MS
Cadmium	1.00	1.00	100	ug/L	SW-846 6020A Dissolved	MS
Calcium	500	529	106	ug/L	SW-846 6020A Dissolved	MS
Chromium	1.00	1.04	104	ug/L	SW-846 6020A Dissolved	MS
Cobalt	1.00	1.03	103	ug/L	SW-846 6020A Dissolved	MS
Copper	1.00	1.10	110	ug/L	SW-846 6020A Dissolved	MS
Iron	100	102	102	ug/L	SW-846 6020A Dissolved	MS
Lead	1.00	0.960	96	ug/L	SW-846 6020A Dissolved	MS
Magnesium	100	102	102	ug/L	SW-846 6020A Dissolved	MS
Manganese	5.00	4.90	98	ug/L	SW-846 6020A Dissolved	MS
Molybdenum	1.00	0.990	99	ug/L	SW-846 6020A Dissolved	MS
Nickel	2.00	2.08	104	ug/L	SW-846 6020A Dissolved	MS
Potassium	100	104	104	ug/L	SW-846 6020A Dissolved	MS
Selenium	1.00	0.950	95	ug/L	SW-846 6020A Dissolved	MS
Silver	1.00	0.960	96	ug/L	SW-846 6020A Dissolved	MS
Sodium	100	104	104	ug/L	SW-846 6020A Dissolved	MS
Thallium	1.00	1.02	102	ug/L	SW-846 6020A Dissolved	MS
Titanium	1.00	1.04	104	ug/L	SW-846 6020A Dissolved	MS
Vanadium	1.00	1.00	100	ug/L	SW-846 6020A Dissolved	MS
Zinc	20.0	19.8	99	ug/L	SW-846 6020A Dissolved	MS

LLCCV CONTROL LIMITS EPA 6020A/EPA 200.8 = 70-130

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-88-3 Absolute Standards Instrument ID: ICPMS2 ICAL ID: 13

Date Analyzed: 10/23/14 Time: 1114

CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Antimony	20.0	18.8	94	ug/L	SW-846 6020A Dissolved	MS
Arsenic	10.0	10.1	101	ug/L	SW-846 6020A Dissolved	MS
Barium	10.0	10.2	102	ug/L	SW-846 6020A Dissolved	MS
Beryllium	10.0	9.81	98	ug/L	SW-846 6020A Dissolved	MS
Cadmium	10.0	9.77	98	ug/L	SW-846 6020A Dissolved	MS
Calcium	5000	5120	102	ug/L	SW-846 6020A Dissolved	MS
Chromium	10.0	10.2	102	ug/L	SW-846 6020A Dissolved	MS
Cobalt	10.0	10.3	103	ug/L	SW-846 6020A Dissolved	MS
Copper	10.0	10.5	105	ug/L	SW-846 6020A Dissolved	MS
Iron	1000	1010	101	ug/L	SW-846 6020A Dissolved	MS
Lead	10.0	10.1	101	ug/L	SW-846 6020A Dissolved	MS
Magnesium	1000	1020	102	ug/L	SW-846 6020A Dissolved	MS
Manganese	50.0	48.3	97	ug/L	SW-846 6020A Dissolved	MS
Molybdenum	10.0	10.1	101	ug/L	SW-846 6020A Dissolved	MS
Nickel	20.0	20.9	104	ug/L	SW-846 6020A Dissolved	MS
Potassium	1000	1030	103	ug/L	SW-846 6020A Dissolved	MS
Selenium	10.0	9.92	99	ug/L	SW-846 6020A Dissolved	MS
Silver	10.0	9.92	99	ug/L	SW-846 6020A Dissolved	MS
Sodium	1000	1020	102	ug/L	SW-846 6020A Dissolved	MS
Thallium	10.0	10.0	100	ug/L	SW-846 6020A Dissolved	MS
Titanium	10.0	10.0	100	ug/L	SW-846 6020A Dissolved	MS
Vanadium	10.0	10.0	100	ug/L	SW-846 6020A Dissolved	MS
Zinc	200	197	98	ug/L	SW-846 6020A Dissolved	MS
Aluminum	200	203	101	ug/L	SW-846 6020A Dissolved	MS

CCV CONTROL LIMITS EPA 6010/6020A/200.7/200.8 = 90-110, EPA 7470/7471/7XXX = 80-120

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-93-9 CPI Instrument ID: ICPMS2 ICAL ID: 17

Date Analyzed: 11/04/14 Time: 1122

INITIAL CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Manganese	50.0	48.9	98	ug/L	SW-846 6020A Dissolved	MS
Molybdenum	50.0	49.0	98	ug/L	SW-846 6020A Dissolved	MS
Nickel	100	104	104	ug/L	SW-846 6020A Dissolved	MS
Potassium	5000	5230	105	ug/L	SW-846 6020A Dissolved	MS
Selenium	25.0	24.1	97	ug/L	SW-846 6020A Dissolved	MS
Silver	50.0	47.8	96	ug/L	SW-846 6020A Dissolved	MS
Sodium	5000	5100	102	ug/L	SW-846 6020A Dissolved	MS
Thallium	50.0	50.5	101	ug/L	SW-846 6020A Dissolved	MS
Titanium	50.0	50.9	102	ug/L	SW-846 6020A Dissolved	MS
Vanadium	50.0	51.3	103	ug/L	SW-846 6020A Dissolved	MS
Zinc	1000	1050	105	ug/L	SW-846 6020A Dissolved	MS
Aluminum	1000	1020	102	ug/L	SW-846 6020A Dissolved	MS
Antimony	50.0	49.9	100	ug/L	SW-846 6020A Dissolved	MS
Arsenic	50.0	50.1	100	ug/L	SW-846 6020A Dissolved	MS
Barium	50.0	49.0	98	ug/L	SW-846 6020A Dissolved	MS
Beryllium	50.0	51.6	103	ug/L	SW-846 6020A Dissolved	MS
Cadmium	50.0	49.8	100	ug/L	SW-846 6020A Dissolved	MS
Calcium	25000	25500	102	ug/L	SW-846 6020A Dissolved	MS
Chromium	50.0	51.7	103	ug/L	SW-846 6020A Dissolved	MS
Cobalt	50.0	51.4	103	ug/L	SW-846 6020A Dissolved	MS
Copper	50.0	52.2	104	ug/L	SW-846 6020A Dissolved	MS
Iron	5000	5160	103	ug/L	SW-846 6020A Dissolved	MS
Lead	50.0	49.9	100	ug/L	SW-846 6020A Dissolved	MS
Magnesium	5000	5250	105	ug/L	SW-846 6020A Dissolved	MS

ICV CONTROL LIMITS EPA 6010/6020/200.8 = 90-110 EPA 200.7 = 95-105

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-93-8 Absolute Standards Instrument ID: ICPMS2 ICAL ID: 17

Date Analyzed: 11/04/14 Time: 1127

LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Aluminum	20.0	20.5	103	ug/L	SW-846 6020A Dissolved	MS
Antimony	2.00	2.10	105	ug/L	SW-846 6020A Dissolved	MS
Arsenic	1.00	1.01	101	ug/L	SW-846 6020A Dissolved	MS
Barium	1.00	1.00	100	ug/L	SW-846 6020A Dissolved	MS
Beryllium	1.00	1.02	102	ug/L	SW-846 6020A Dissolved	MS
Cadmium	1.00	1.01	101	ug/L	SW-846 6020A Dissolved	MS
Calcium	500	512	102	ug/L	SW-846 6020A Dissolved	MS
Chromium	1.00	1.06	106	ug/L	SW-846 6020A Dissolved	MS
Cobalt	1.00	1.10	110	ug/L	SW-846 6020A Dissolved	MS
Copper	1.00	1.10	110	ug/L	SW-846 6020A Dissolved	MS
Iron	100	103	103	ug/L	SW-846 6020A Dissolved	MS
Lead	1.00	0.990	99	ug/L	SW-846 6020A Dissolved	MS
Magnesium	100	103	103	ug/L	SW-846 6020A Dissolved	MS
Manganese	5.00	5.06	101	ug/L	SW-846 6020A Dissolved	MS
Molybdenum	1.00	0.970	97	ug/L	SW-846 6020A Dissolved	MS
Nickel	2.00	2.18	109	ug/L	SW-846 6020A Dissolved	MS
Potassium	100	95.1	95	ug/L	SW-846 6020A Dissolved	MS
Selenium	1.00	0.900	90	ug/L	SW-846 6020A Dissolved	MS
Silver	1.00	1.01	101	ug/L	SW-846 6020A Dissolved	MS
Sodium	100	105	105	ug/L	SW-846 6020A Dissolved	MS
Thallium	1.00	0.990	99	ug/L	SW-846 6020A Dissolved	MS
Titanium	1.00	1.01	101	ug/L	SW-846 6020A Dissolved	MS
Vanadium	1.00	1.06	106	ug/L	SW-846 6020A Dissolved	MS
Zinc	20.0	20.8	104	ug/L	SW-846 6020A Dissolved	MS

LLCCV CONTROL LIMITS EPA 6020A/EPA 200.8 = 70-130

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-93-8 Absolute Standards Instrument ID: ICPMS2 ICAL ID: 17

Date Analyzed: 11/04/14 Time: 1204

LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Titanium	1.00	1.04	104	ug/L	SW-846 6020A Dissolved	MS
Vanadium	1.00	1.06	106	ug/L	SW-846 6020A Dissolved	MS
Zinc	20.0	21.1	105	ug/L	SW-846 6020A Dissolved	MS
Aluminum	20.0	21.8	109	ug/L	SW-846 6020A Dissolved	MS
Antimony	2.00	2.10	105	ug/L	SW-846 6020A Dissolved	MS
Arsenic	1.00	1.03	103	ug/L	SW-846 6020A Dissolved	MS
Barium	1.00	1.00	100	ug/L	SW-846 6020A Dissolved	MS
Beryllium	1.00	1.02	102	ug/L	SW-846 6020A Dissolved	MS
Cadmium	1.00	1.01	101	ug/L	SW-846 6020A Dissolved	MS
Calcium	500	504	101	ug/L	SW-846 6020A Dissolved	MS
Chromium	1.00	1.09	109	ug/L	SW-846 6020A Dissolved	MS
Cobalt	1.00	1.08	108	ug/L	SW-846 6020A Dissolved	MS
Copper	1.00	1.15	115	ug/L	SW-846 6020A Dissolved	MS
Iron	100	107	107	ug/L	SW-846 6020A Dissolved	MS
Lead	1.00	1.00	100	ug/L	SW-846 6020A Dissolved	MS
Magnesium	100	107	107	ug/L	SW-846 6020A Dissolved	MS
Manganese	5.00	4.96	99	ug/L	SW-846 6020A Dissolved	MS
Molybdenum	1.00	1.00	100	ug/L	SW-846 6020A Dissolved	MS
Nickel	2.00	2.17	109	ug/L	SW-846 6020A Dissolved	MS
Potassium	100	95.3	95	ug/L	SW-846 6020A Dissolved	MS
Selenium	1.00	0.930	93	ug/L	SW-846 6020A Dissolved	MS
Silver	1.00	1.03	103	ug/L	SW-846 6020A Dissolved	MS
Sodium	100	116	116	ug/L	SW-846 6020A Dissolved	MS
Thallium	1.00	1.03	103	ug/L	SW-846 6020A Dissolved	MS

LLCCV CONTROL LIMITS EPA 6020A/EPA 200.8 = 70-130

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-93-8 Absolute Standards Instrument ID: ICPMS2 ICAL ID: 17

Date Analyzed: 11/04/14 Time: 1207

CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	200	202	101	ug/L	SW-846 6020A Dissolved	MS
Antimony	20.0	20.0	100	ug/L	SW-846 6020A Dissolved	MS
Arsenic	10.0	10.0	100	ug/L	SW-846 6020A Dissolved	MS
Barium	10.0	9.71	97	ug/L	SW-846 6020A Dissolved	MS
Beryllium	10.0	10.1	101	ug/L	SW-846 6020A Dissolved	MS
Cadmium	10.0	9.84	98	ug/L	SW-846 6020A Dissolved	MS
Calcium	5000	5050	101	ug/L	SW-846 6020A Dissolved	MS
Chromium	10.0	10.3	103	ug/L	SW-846 6020A Dissolved	MS
Cobalt	10.0	10.5	105	ug/L	SW-846 6020A Dissolved	MS
Copper	10.0	10.7	107	ug/L	SW-846 6020A Dissolved	MS
Iron	1000	1040	104	ug/L	SW-846 6020A Dissolved	MS
Lead	10.0	9.86	99	ug/L	SW-846 6020A Dissolved	MS
Magnesium	1000	1050	105	ug/L	SW-846 6020A Dissolved	MS
Manganese	50.0	49.8	100	ug/L	SW-846 6020A Dissolved	MS
Molybdenum	10.0	9.69	97	ug/L	SW-846 6020A Dissolved	MS
Nickel	20.0	21.3	106	ug/L	SW-846 6020A Dissolved	MS
Potassium	1000	1000	100	ug/L	SW-846 6020A Dissolved	MS
Selenium	10.0	9.82	98	ug/L	SW-846 6020A Dissolved	MS
Silver	10.0	9.88	99	ug/L	SW-846 6020A Dissolved	MS
Sodium	1000	1060	106	ug/L	SW-846 6020A Dissolved	MS
Thallium	10.0	9.98	100	ug/L	SW-846 6020A Dissolved	MS
Titanium	10.0	10.0	100	ug/L	SW-846 6020A Dissolved	MS
Vanadium	10.0	10.1	101	ug/L	SW-846 6020A Dissolved	MS
Zinc	200	206	103	ug/L	SW-846 6020A Dissolved	MS

CCV CONTROL LIMITS EPA 6010/6020A/200.7/200.8 = 90-110, EPA 7470/7471/7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-93-8 Absolute Standards Instrument ID: ICPMS2 ICAL ID: 17

Date Analyzed: 11/04/14 Time: 1235

LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Aluminum	20.0	21.4	107	ug/L	SW-846 6020A Dissolved	MS
Antimony	2.00	2.05	103	ug/L	SW-846 6020A Dissolved	MS
Arsenic	1.00	1.04	104	ug/L	SW-846 6020A Dissolved	MS
Barium	1.00	1.01	101	ug/L	SW-846 6020A Dissolved	MS
Beryllium	1.00	1.02	102	ug/L	SW-846 6020A Dissolved	MS
Cadmium	1.00	0.990	99	ug/L	SW-846 6020A Dissolved	MS
Calcium	500	509	102	ug/L	SW-846 6020A Dissolved	MS
Chromium	1.00	1.01	101	ug/L	SW-846 6020A Dissolved	MS
Cobalt	1.00	1.09	109	ug/L	SW-846 6020A Dissolved	MS
Copper	1.00	1.15	115	ug/L	SW-846 6020A Dissolved	MS
Iron	100	105	105	ug/L	SW-846 6020A Dissolved	MS
Lead	1.00	0.990	99	ug/L	SW-846 6020A Dissolved	MS
Magnesium	100	107	107	ug/L	SW-846 6020A Dissolved	MS
Manganese	5.00	5.08	102	ug/L	SW-846 6020A Dissolved	MS
Molybdenum	1.00	0.990	99	ug/L	SW-846 6020A Dissolved	MS
Nickel	2.00	2.15	107	ug/L	SW-846 6020A Dissolved	MS
Potassium	100	98.2	98	ug/L	SW-846 6020A Dissolved	MS
Selenium	1.00	0.940	94	ug/L	SW-846 6020A Dissolved	MS
Silver	1.00	1.02	102	ug/L	SW-846 6020A Dissolved	MS
Sodium	100	135	135	ug/L	SW-846 6020A Dissolved	MS
Thallium	1.00	0.980	98	ug/L	SW-846 6020A Dissolved	MS
Titanium	1.00	1.05	105	ug/L	SW-846 6020A Dissolved	MS
Vanadium	1.00	1.04	104	ug/L	SW-846 6020A Dissolved	MS
Zinc	20.0	21.0	105	ug/L	SW-846 6020A Dissolved	MS

LLCCV CONTROL LIMITS EPA 6020A/EPA 200.8 = 70-130

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-93-8 Absolute Standards Instrument ID: ICPMS2 ICAL ID: 17

Date Analyzed: 11/04/14 Time: 1237

CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	200	203	101	ug/L	SW-846 6020A Dissolved	MS
Antimony	20.0	20.1	101	ug/L	SW-846 6020A Dissolved	MS
Arsenic	10.0	10.1	101	ug/L	SW-846 6020A Dissolved	MS
Barium	10.0	9.70	97	ug/L	SW-846 6020A Dissolved	MS
Beryllium	10.0	10.3	103	ug/L	SW-846 6020A Dissolved	MS
Cadmium	10.0	9.79	98	ug/L	SW-846 6020A Dissolved	MS
Calcium	5000	5050	101	ug/L	SW-846 6020A Dissolved	MS
Chromium	10.0	10.2	102	ug/L	SW-846 6020A Dissolved	MS
Cobalt	10.0	10.5	105	ug/L	SW-846 6020A Dissolved	MS
Copper	10.0	10.5	105	ug/L	SW-846 6020A Dissolved	MS
Iron	1000	1020	102	ug/L	SW-846 6020A Dissolved	MS
Lead	10.0	9.92	99	ug/L	SW-846 6020A Dissolved	MS
Magnesium	1000	1040	104	ug/L	SW-846 6020A Dissolved	MS
Manganese	50.0	49.5	99	ug/L	SW-846 6020A Dissolved	MS
Molybdenum	10.0	9.76	98	ug/L	SW-846 6020A Dissolved	MS
Nickel	20.0	20.8	104	ug/L	SW-846 6020A Dissolved	MS
Potassium	1000	999	100	ug/L	SW-846 6020A Dissolved	MS
Selenium	10.0	10.0	100	ug/L	SW-846 6020A Dissolved	MS
Silver	10.0	9.83	98	ug/L	SW-846 6020A Dissolved	MS
Sodium	1000	1070	107	ug/L	SW-846 6020A Dissolved	MS
Thallium	10.0	9.99	100	ug/L	SW-846 6020A Dissolved	MS
Titanium	10.0	9.93	99	ug/L	SW-846 6020A Dissolved	MS
Vanadium	10.0	10.1	101	ug/L	SW-846 6020A Dissolved	MS
Zinc	200	204	102	ug/L	SW-846 6020A Dissolved	MS

CCV CONTROL LIMITS EPA 6010/6020A/200.7/200.8 = 90-110, EPA 7470/7471/7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL
Contract:
Lab Code LA024 Case No.:
SAS No.: SDG No.: 214102205
Calibration Source: 243-83-11 CPI
Instrument ID: FIMS1 ICAL ID: 1
Date Analyzed: 10/23/14 Time: 1430

INITIAL CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Mercury	0.00500	0.00520	104	mg/L	SW-846 7470A	AV

ICV CONTROL LIMITS EPA 6010/6020/200.8 = 90-110 EPA 200.7 = 95-105

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL
Contract:

Lab Code LA024 Case No.:
SAS No.: SDG No.: 214102205

Calibration Source: 243-83-10 EXAXOL
Instrument ID: FIMS1 ICAL ID: 1

Date Analyzed: 10/23/14 Time: 1456

CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Mercury	0.00500	0.00510	103	mg/L	SW-846 7470A	AV

CCV CONTROL LIMITS EPA 6010/6020A/200.7/200.8 = 90-110, EPA 7470/7471/7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL
Contract:
Lab Code LA024 Case No.:
SAS No.: SDG No.: 214102205
Calibration Source: 243-83-10 EXAXOL
Instrument ID: FIMS1 ICAL ID: 1
Date Analyzed: 10/23/14 Time: 1517

CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Mercury	0.00500	0.00500	100	mg/L	SW-846 7470A	AV

CCV CONTROL LIMITS EPA 6010/6020A/200.7/200.8 = 90-110, EPA 7470/7471/7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-83-11 CPI Instrument ID: FIMS1 ICAL ID: 11

Date Analyzed: 10/27/14 Time: 1428

INITIAL CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Mercury	0.00500	0.00460	92	mg/L	SW-846 7470A Dissolved	AV

ICV CONTROL LIMITS EPA 6010/6020/200.8 = 90-110 EPA 200.7 = 95-105

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-83-10 EXAXOL Instrument ID: FIMS1 ICAL ID: 11

Date Analyzed: 10/27/14 Time: 1449

CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Mercury	0.00500	0.00520	103	mg/L	SW-846 7470A Dissolved	AV

CCV CONTROL LIMITS EPA 6010/6020A/200.7/200.8 = 90-110, EPA 7470/7471/7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-83-10 EXAXOL Instrument ID: FIMS1 ICAL ID: 11

Date Analyzed: 10/27/14 Time: 1510

CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Mercury	0.00500	0.00520	105	mg/L	SW-846 7470A Dissolved	AV

CCV CONTROL LIMITS EPA 6010/6020A/200.7/200.8 = 90-110, EPA 7470/7471/7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-83-10 EXAXOL Instrument ID: FIMS1 ICAL ID: 11

Date Analyzed: 10/27/14 Time: 1532

CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Mercury	0.00500	0.00520	104	mg/L	SW-846 7470A Dissolved	AV

CCV CONTROL LIMITS EPA 6010/6020A/200.7/200.8 = 90-110, EPA 7470/7471/7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-83-11 CPI Instrument ID: FIMS1 ICAL ID: 2

Date Analyzed: 10/28/14 Time: 1118

INITIAL CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Mercury	0.00500	0.00450	90	mg/L	SW-846 7470A	AV

ICV CONTROL LIMITS EPA 6010/6020/200.8 = 90-110 EPA 200.7 = 95-105

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-83-10 EXAXOL Instrument ID: FIMS1 ICAL ID: 2

Date Analyzed: 10/28/14 Time: 1147

CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Mercury	0.00500	0.00490	97	mg/L	SW-846 7470A	AV

CCV CONTROL LIMITS EPA 6010/6020A/200.7/200.8 = 90-110, EPA 7470/7471/7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL
Contract:
Lab Code LA024 Case No.:
SAS No.: SDG No.: 214102205
Calibration Source: 243-83-10 EXAXOL
Instrument ID: FIMS1 ICAL ID: 2
Date Analyzed: 10/28/14 Time: 1213

CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Mercury	0.00500	0.00490	97	mg/L	SW-846 7470A	AV

CCV CONTROL LIMITS EPA 6010/6020A/200.7/200.8 = 90-110, EPA 7470/7471/7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-83-10 EXAXOL Instrument ID: FIMS1 ICAL ID: 2

Date Analyzed: 10/28/14 Time: 1234

CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Mercury	0.00500	0.00480	95	mg/L	SW-846 7470A	AV

CCV CONTROL LIMITS EPA 6010/6020A/200.7/200.8 = 90-110, EPA 7470/7471/7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL
Contract:
Lab Code LA024 Case No.:
SAS No.: SDG No.: 214102205
Calibration Source: 243-83-10 EXAXOL
Instrument ID: FIMS1 ICAL ID: 2
Date Analyzed: 10/28/14 Time: 1307

CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Mercury	0.00500	0.00460	93	mg/L	SW-846 7470A	AV

CCV CONTROL LIMITS EPA 6010/6020A/200.7/200.8 = 90-110, EPA 7470/7471/7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL
Contract:
Lab Code LA024 Case No.:
SAS No.: SDG No.: 214102205
Calibration Source: 243-83-10 EXAXOL
Instrument ID: FIMS1 ICAL ID: 2
Date Analyzed: 10/28/14 Time: 1336

CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Mercury	0.00500	0.00460	92	mg/L	SW-846 7470A	AV

CCV CONTROL LIMITS EPA 6010/6020A/200.7/200.8 = 90-110, EPA 7470/7471/7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Calibration Source: 243-83-10 EXAXOL Instrument ID: FIMS1 ICAL ID: 2

Date Analyzed: 10/28/14 Time: 1357

CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Mercury	0.00500	0.00450	91	mg/L	SW-846 7470A	AV

CCV CONTROL LIMITS EPA 6010/6020A/200.7/200.8 = 90-110, EPA 7470/7471/7XXX = 80-120

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Lab Sample ID: ICB ICAL ID: 3

Lab Sample DESC: ICB FOR HBN 543993 [ICP/9563] Preparation Blank Matrix: (soil / water)

Instrument ID: ICPMS1 Date Analyzed: 10/29/14 Time: 1433

INITIAL CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS
Antimony	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Arsenic	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Barium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Beryllium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cadmium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Calcium	500	U	ug/L	125	500	SW-846 6020A	MS
Chromium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cobalt	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Copper	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Iron	100	U	ug/L	25.0	100	SW-846 6020A	MS
Lead	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Magnesium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Manganese	5.00	U	ug/L	1.25	5.00	SW-846 6020A	MS
Molybdenum	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Nickel	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Potassium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Selenium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Silver	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Sodium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Thallium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Titanium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Vanadium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Zinc	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS

Lab Name: GCAL | Contract:

Lab Code: LA024 | Case No.: | SAS No.: | SDG No.: 214102205

Lab Sample ID: CCB | ICAL ID: 3

Lab Sample DESC: CCB FOR HBN 543993 [ICP/9563] | Preparation Blank Matrix: (soil / water)

Instrument ID: ICPMS1 | Date Analyzed: 10/30/14 | Time: 0249

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS
Antimony	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Arsenic	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Barium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Beryllium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cadmium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Calcium	500	U	ug/L	125	500	SW-846 6020A	MS
Chromium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cobalt	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Copper	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Iron	100	U	ug/L	25.0	100	SW-846 6020A	MS
Lead	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Magnesium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Manganese	5.00	U	ug/L	1.25	5.00	SW-846 6020A	MS
Molybdenum	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Nickel	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Potassium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Selenium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Silver	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Sodium	92.2	J	ug/L	25.0	100	SW-846 6020A	MS
Thallium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Titanium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Vanadium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Zinc	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Lab Sample ID: 1373519 ICAL ID: 3

Lab Sample DESC: MB1373519 Preparation Blank Matrix: (soil / water) Water

Instrument ID: ICPMS1 Date Analyzed: 10/30/14 Time: 0334

PREPARATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	5.00	U	ug/L	5.00	20.0	SW-846 6020A	MS
Antimony	0.50	U	ug/L	0.50	2.00	SW-846 6020A	MS
Arsenic	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Barium	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Beryllium	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cadmium	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Calcium	125	U	ug/L	125	500	SW-846 6020A	MS
Chromium	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cobalt	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Copper	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Iron	25.0	U	ug/L	25.0	100	SW-846 6020A	MS
Lead	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Magnesium	25.0	U	ug/L	25.0	100	SW-846 6020A	MS
Manganese	1.25	U	ug/L	1.25	5.00	SW-846 6020A	MS
Molybdenum	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Nickel	0.50	U	ug/L	0.50	2.00	SW-846 6020A	MS
Potassium	25.0	U	ug/L	25.0	100	SW-846 6020A	MS
Selenium	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Silver	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Sodium	25.0	U	ug/L	25.0	100	SW-846 6020A	MS
Thallium	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Titanium	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Vanadium	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Zinc	5.00	U	ug/L	5.00	20.0	SW-846 6020A	MS

Lab Name: GCAL
Contract:
Lab Code LA024 Case No.:
SAS No.: SDG No.: 214102205
Lab Sample ID: CCB
ICAL ID: 3
Lab Sample DESC: CCB FOR HBN 543993 [ICP/9563]
Preparation Blank Matrix: (soil / water)
Instrument ID: ICPMS1
Date Analyzed: 10/30/14 Time: 0426

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS
Antimony	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Arsenic	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Barium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Beryllium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cadmium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Calcium	500	U	ug/L	125	500	SW-846 6020A	MS
Chromium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cobalt	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Copper	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Iron	100	U	ug/L	25.0	100	SW-846 6020A	MS
Lead	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Magnesium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Manganese	5.00	U	ug/L	1.25	5.00	SW-846 6020A	MS
Molybdenum	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Nickel	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Potassium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Selenium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Silver	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Sodium	28.0	J	ug/L	25.0	100	SW-846 6020A	MS
Thallium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Titanium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Vanadium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Zinc	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Lab Sample ID: CCB ICAL ID: 3

Lab Sample DESC: CCB FOR HBN 543993 [ICP/9563] Preparation Blank Matrix: (soil / water)

Instrument ID: ICPMS1 Date Analyzed: 10/30/14 Time: 0602

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS
Antimony	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Arsenic	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Barium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Beryllium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cadmium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Calcium	500	U	ug/L	125	500	SW-846 6020A	MS
Chromium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cobalt	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Copper	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Iron	100	U	ug/L	25.0	100	SW-846 6020A	MS
Lead	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Magnesium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Manganese	5.00	U	ug/L	1.25	5.00	SW-846 6020A	MS
Molybdenum	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Nickel	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Potassium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Selenium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Silver	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Sodium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Thallium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Titanium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Vanadium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Zinc	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Lab Sample ID: ICB ICAL ID: 4

Lab Sample DESC: ICB FOR HBN 544053 [ICP/9564] Preparation Blank Matrix: (soil / water)

Instrument ID: ICPMS1 Date Analyzed: 10/30/14 Time: 1318

INITIAL CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS
Antimony	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Arsenic	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Barium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Beryllium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cadmium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Calcium	500	U	ug/L	125	500	SW-846 6020A	MS
Chromium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cobalt	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Copper	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Iron	100	U	ug/L	25.0	100	SW-846 6020A	MS
Lead	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Magnesium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Manganese	5.00	U	ug/L	1.25	5.00	SW-846 6020A	MS
Molybdenum	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Nickel	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Potassium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Selenium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Silver	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Sodium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Thallium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Titanium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Vanadium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Zinc	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS

Lab Name: GCAL | Contract:

Lab Code LA024 | Case No.: | SAS No.: | SDG No.: 214102205

Lab Sample ID: CCB | ICAL ID: 4

Lab Sample DESC: CCB FOR HBN 544053 [ICP/9564] | Preparation Blank Matrix: (soil / water)

Instrument ID: ICPMS1 | Date Analyzed: 10/30/14 | Time: 2251

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS
Antimony	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Arsenic	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Barium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Beryllium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cadmium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Calcium	500	U	ug/L	125	500	SW-846 6020A	MS
Chromium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cobalt	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Copper	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Iron	100	U	ug/L	25.0	100	SW-846 6020A	MS
Lead	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Magnesium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Manganese	5.00	U	ug/L	1.25	5.00	SW-846 6020A	MS
Molybdenum	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Nickel	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Potassium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Selenium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Silver	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Sodium	109		ug/L	25.0	100	SW-846 6020A	MS
Thallium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Titanium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Vanadium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Zinc	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Lab Sample ID: CCB ICAL ID: 4

Lab Sample DESC: CCB FOR HBN 544053 [ICP/9564] Preparation Blank Matrix: (soil / water)

Instrument ID: ICPMS1 Date Analyzed: 10/31/14 Time: 0028

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS
Antimony	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Arsenic	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Barium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Beryllium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cadmium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Calcium	500	U	ug/L	125	500	SW-846 6020A	MS
Chromium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cobalt	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Copper	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Iron	100	U	ug/L	25.0	100	SW-846 6020A	MS
Lead	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Magnesium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Manganese	5.00	U	ug/L	1.25	5.00	SW-846 6020A	MS
Molybdenum	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Nickel	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Potassium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Selenium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Silver	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Sodium	52.2	J	ug/L	25.0	100	SW-846 6020A	MS
Thallium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Titanium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Vanadium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Zinc	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS

Lab Name: GCAL | Contract:

Lab Code LA024 | Case No.: | SAS No.: | SDG No.: 214102205

Lab Sample ID: CCB | ICAL ID: 4

Lab Sample DESC: CCB FOR HBN 544053 [ICP/9564] | Preparation Blank Matrix: (soil / water)

Instrument ID: ICPMS1 | Date Analyzed: 10/31/14 | Time: 0204

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS
Antimony	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Arsenic	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Barium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Beryllium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cadmium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Calcium	500	U	ug/L	125	500	SW-846 6020A	MS
Chromium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cobalt	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Copper	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Iron	100	U	ug/L	25.0	100	SW-846 6020A	MS
Lead	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Magnesium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Manganese	5.00	U	ug/L	1.25	5.00	SW-846 6020A	MS
Molybdenum	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Nickel	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Potassium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Selenium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Silver	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Sodium	43.0	J	ug/L	25.0	100	SW-846 6020A	MS
Thallium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Titanium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Vanadium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Zinc	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS

Lab Name: GCAL | Contract:

Lab Code: LA024 | Case No.: | SAS No.: | SDG No.: 214102205

Lab Sample ID: CCB | ICAL ID: 4

Lab Sample DESC: CCB FOR HBN 544053 [ICP/9564] | Preparation Blank Matrix: (soil / water)

Instrument ID: ICPMS1 | Date Analyzed: 10/31/14 | Time: 0340

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS
Antimony	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Arsenic	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Barium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Beryllium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cadmium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Calcium	500	U	ug/L	125	500	SW-846 6020A	MS
Chromium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cobalt	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Copper	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Iron	100	U	ug/L	25.0	100	SW-846 6020A	MS
Lead	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Magnesium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Manganese	5.00	U	ug/L	1.25	5.00	SW-846 6020A	MS
Molybdenum	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Nickel	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Potassium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Selenium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Silver	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Sodium	93.0	J	ug/L	25.0	100	SW-846 6020A	MS
Thallium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Titanium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Vanadium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Zinc	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Lab Sample ID: CCB ICAL ID: 4

Lab Sample DESC: CCB FOR HBN 544053 [ICP/9564] Preparation Blank Matrix: (soil / water)

Instrument ID: ICPMS1 Date Analyzed: 10/31/14 Time: 0517

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS
Antimony	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Arsenic	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Barium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Beryllium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cadmium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Calcium	500	U	ug/L	125	500	SW-846 6020A	MS
Chromium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cobalt	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Copper	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Iron	100	U	ug/L	25.0	100	SW-846 6020A	MS
Lead	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Magnesium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Manganese	5.00	U	ug/L	1.25	5.00	SW-846 6020A	MS
Molybdenum	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Nickel	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Potassium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Selenium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Silver	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Sodium	28.7	J	ug/L	25.0	100	SW-846 6020A	MS
Thallium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Titanium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Vanadium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Zinc	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS

Lab Name: GCAL
Contract:
Lab Code LA024 Case No.:
SAS No.: SDG No.: 214102205
Lab Sample ID: CCB
ICAL ID: 4
Lab Sample DESC: CCB FOR HBN 544053 [ICP/9564]
Preparation Blank Matrix: (soil / water)
Instrument ID: ICPMS1
Date Analyzed: 10/31/14 Time: 0708

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS
Antimony	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Arsenic	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Barium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Beryllium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cadmium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Calcium	500	U	ug/L	125	500	SW-846 6020A	MS
Chromium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cobalt	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Copper	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Iron	100	U	ug/L	25.0	100	SW-846 6020A	MS
Lead	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Magnesium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Manganese	5.00	U	ug/L	1.25	5.00	SW-846 6020A	MS
Molybdenum	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Nickel	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Potassium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Selenium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Silver	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Sodium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Thallium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Titanium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Vanadium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Zinc	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS

Lab Name: GCAL | Contract:

Lab Code: LA024 | Case No.: | SAS No.: | SDG No.: 214102205

Lab Sample ID: CCB | ICAL ID: 4

Lab Sample DESC: CCB FOR HBN 544053 [ICP/9564] | Preparation Blank Matrix: (soil / water)

Instrument ID: ICPMS1 | Date Analyzed: 10/31/14 | Time: 0859

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS
Antimony	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Arsenic	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Barium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Beryllium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cadmium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Calcium	500	U	ug/L	125	500	SW-846 6020A	MS
Chromium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cobalt	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Copper	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Iron	100	U	ug/L	25.0	100	SW-846 6020A	MS
Lead	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Magnesium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Manganese	5.00	U	ug/L	1.25	5.00	SW-846 6020A	MS
Molybdenum	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Nickel	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Potassium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Selenium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Silver	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Sodium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Thallium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Titanium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Vanadium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Zinc	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS

Lab Name: GCAL | Contract:

Lab Code: LA024 | Case No.: | SAS No.: | SDG No.: 214102205

Lab Sample ID: CCB | ICAL ID: 4

Lab Sample DESC: CCB FOR HBN 544053 [ICP/9564] | Preparation Blank Matrix: (soil / water)

Instrument ID: ICPMS1 | Date Analyzed: 10/31/14 | Time: 1036

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS
Antimony	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Arsenic	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Barium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Beryllium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cadmium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Calcium	500	U	ug/L	125	500	SW-846 6020A	MS
Chromium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cobalt	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Copper	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Iron	100	U	ug/L	25.0	100	SW-846 6020A	MS
Lead	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Magnesium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Manganese	5.00	U	ug/L	1.25	5.00	SW-846 6020A	MS
Molybdenum	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Nickel	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Potassium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Selenium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Silver	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Sodium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Thallium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Titanium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Vanadium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Zinc	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS

Lab Name: GCAL | Contract:

Lab Code: LA024 | Case No.: | SAS No.: | SDG No.: 214102205

Lab Sample ID: ICB | ICAL ID: 5

Lab Sample DESC: ICB FOR HBN 544138 [ICP/9565] | Preparation Blank Matrix: (soil / water)

Instrument ID: ICPMS1 | Date Analyzed: 10/31/14 | Time: 1616

INITIAL CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS
Antimony	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Arsenic	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Barium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Beryllium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cadmium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Calcium	500	U	ug/L	125	500	SW-846 6020A	MS
Chromium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cobalt	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Copper	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Iron	100	U	ug/L	25.0	100	SW-846 6020A	MS
Lead	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Magnesium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Manganese	5.00	U	ug/L	1.25	5.00	SW-846 6020A	MS
Molybdenum	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Nickel	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Potassium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Selenium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Silver	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Sodium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Thallium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Titanium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Vanadium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Zinc	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Lab Sample ID: CCB ICAL ID: 5

Lab Sample DESC: CCB FOR HBN 544138 [ICP/9565] Preparation Blank Matrix: (soil / water)

Instrument ID: ICPMS1 Date Analyzed: 10/31/14 Time: 2249

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS
Antimony	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Arsenic	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Barium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Beryllium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cadmium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Calcium	500	U	ug/L	125	500	SW-846 6020A	MS
Chromium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cobalt	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Copper	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Iron	100	U	ug/L	25.0	100	SW-846 6020A	MS
Lead	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Magnesium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Manganese	5.00	U	ug/L	1.25	5.00	SW-846 6020A	MS
Molybdenum	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Nickel	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Potassium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Selenium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Silver	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Sodium	38.8	J	ug/L	25.0	100	SW-846 6020A	MS
Thallium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Titanium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Vanadium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Zinc	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS

Lab Name: GCAL | Contract:

Lab Code: LA024 | Case No.: | SAS No.: | SDG No.: 214102205

Lab Sample ID: CCB | ICAL ID: 5

Lab Sample DESC: CCB FOR HBN 544138 [ICP/9565] | Preparation Blank Matrix: (soil / water)

Instrument ID: ICPMS1 | Date Analyzed: 11/01/14 | Time: 0026

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS
Antimony	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Arsenic	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Barium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Beryllium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cadmium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Calcium	500	U	ug/L	125	500	SW-846 6020A	MS
Chromium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cobalt	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Copper	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Iron	100	U	ug/L	25.0	100	SW-846 6020A	MS
Lead	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Magnesium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Manganese	5.00	U	ug/L	1.25	5.00	SW-846 6020A	MS
Molybdenum	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Nickel	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Potassium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Selenium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Silver	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Sodium	49.2	J	ug/L	25.0	100	SW-846 6020A	MS
Thallium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Titanium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Vanadium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Zinc	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS

Lab Name: GCAL | Contract:

Lab Code: LA024 | Case No.: | SAS No.: | SDG No.: 214102205

Lab Sample ID: CCB | ICAL ID: 5

Lab Sample DESC: CCB FOR HBN 544138 [ICP/9565] | Preparation Blank Matrix: (soil / water)

Instrument ID: ICPMS1 | Date Analyzed: 11/01/14 | Time: 0217

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS
Antimony	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Arsenic	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Barium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Beryllium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cadmium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Calcium	500	U	ug/L	125	500	SW-846 6020A	MS
Chromium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cobalt	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Copper	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Iron	100	U	ug/L	25.0	100	SW-846 6020A	MS
Lead	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Magnesium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Manganese	5.00	U	ug/L	1.25	5.00	SW-846 6020A	MS
Molybdenum	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Nickel	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Potassium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Selenium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Silver	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Sodium	36.6	J	ug/L	25.0	100	SW-846 6020A	MS
Thallium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Titanium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Vanadium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Zinc	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS

Lab Name: GCAL | Contract:

Lab Code: LA024 | Case No.: | SAS No.: | SDG No.: 214102205

Lab Sample ID: ICB | ICAL ID: 6

Lab Sample DESC: ICB FOR HBN 544225 [ICP/9567] | Preparation Blank Matrix: (soil / water)

Instrument ID: ICPMS2 | Date Analyzed: 11/03/14 | Time: 1036

INITIAL CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS
Antimony	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Arsenic	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Barium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Beryllium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cadmium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Calcium	500	U	ug/L	125	500	SW-846 6020A	MS
Chromium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cobalt	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Copper	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Iron	100	U	ug/L	25.0	100	SW-846 6020A	MS
Lead	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Magnesium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Manganese	5.00	U	ug/L	1.25	5.00	SW-846 6020A	MS
Molybdenum	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Nickel	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Potassium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Selenium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Silver	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Sodium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Thallium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Titanium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Vanadium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Zinc	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS

Lab Name: GCAL | Contract:

Lab Code LA024 | Case No.: | SAS No.: | SDG No.: 214102205

Lab Sample ID: 1372874 | ICAL ID: 6

Lab Sample DESC: MB1372874 | Preparation Blank Matrix: (soil / water) Water

Instrument ID: ICPMS2 | Date Analyzed: 11/03/14 | Time: 1053

PREPARATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	5.00	U	ug/L	5.00	20.0	SW-846 6020A	MS
Antimony	0.50	U	ug/L	0.50	2.00	SW-846 6020A	MS
Arsenic	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Barium	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Beryllium	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cadmium	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Calcium	125	U	ug/L	125	500	SW-846 6020A	MS
Chromium	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cobalt	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Copper	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Iron	25.0	U	ug/L	25.0	100	SW-846 6020A	MS
Lead	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Magnesium	25.0	U	ug/L	25.0	100	SW-846 6020A	MS
Manganese	1.25	U	ug/L	1.25	5.00	SW-846 6020A	MS
Molybdenum	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Nickel	0.50	U	ug/L	0.50	2.00	SW-846 6020A	MS
Potassium	25.0	U	ug/L	25.0	100	SW-846 6020A	MS
Selenium	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Silver	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Sodium	25.0	U	ug/L	25.0	100	SW-846 6020A	MS
Thallium	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Titanium	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Vanadium	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Zinc	5.00	U	ug/L	5.00	20.0	SW-846 6020A	MS

Lab Name: GCAL | Contract:

Lab Code: LA024 | Case No.: | SAS No.: | SDG No.: 214102205

Lab Sample ID: CCB | ICAL ID: 6

Lab Sample DESC: CCB FOR HBN 544225 [ICP/9567] | Preparation Blank Matrix: (soil / water)

Instrument ID: ICPMS2 | Date Analyzed: 11/03/14 | Time: 1118

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS
Antimony	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Arsenic	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Barium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Beryllium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cadmium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Calcium	500	U	ug/L	125	500	SW-846 6020A	MS
Chromium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cobalt	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Copper	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Iron	100	U	ug/L	25.0	100	SW-846 6020A	MS
Lead	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Magnesium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Manganese	5.00	U	ug/L	1.25	5.00	SW-846 6020A	MS
Molybdenum	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Nickel	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Potassium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Selenium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Silver	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Sodium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Thallium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Titanium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Vanadium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Zinc	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS

Lab Name: GCAL
Contract:
Lab Code LA024 Case No.:
SAS No.: SDG No.: 214102205
Lab Sample ID: CCB
ICAL ID: 6
Lab Sample DESC: CCB FOR HBN 544225 [ICP/9567]
Preparation Blank Matrix: (soil / water)
Instrument ID: ICPMS2
Date Analyzed: 11/03/14 Time: 1150

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS
Antimony	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Arsenic	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Barium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Beryllium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cadmium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Calcium	500	U	ug/L	125	500	SW-846 6020A	MS
Chromium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cobalt	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Copper	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Iron	100	U	ug/L	25.0	100	SW-846 6020A	MS
Lead	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Magnesium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Manganese	5.00	U	ug/L	1.25	5.00	SW-846 6020A	MS
Molybdenum	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Nickel	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Potassium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Selenium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Silver	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Sodium	25.5	J	ug/L	25.0	100	SW-846 6020A	MS
Thallium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Titanium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Vanadium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Zinc	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Lab Sample ID: ICB ICAL ID: 7

Lab Sample DESC: ICB FOR HBN 544258 [ICP/9568] Preparation Blank Matrix: (soil / water)

Instrument ID: ICPMS1 Date Analyzed: 11/03/14 Time: 1107

INITIAL CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS
Antimony	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Arsenic	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Barium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Beryllium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cadmium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Calcium	500	U	ug/L	125	500	SW-846 6020A	MS
Chromium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cobalt	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Copper	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Iron	100	U	ug/L	25.0	100	SW-846 6020A	MS
Lead	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Magnesium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Manganese	5.00	U	ug/L	1.25	5.00	SW-846 6020A	MS
Molybdenum	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Nickel	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Potassium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Selenium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Silver	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Sodium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Thallium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Titanium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Vanadium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Zinc	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS

Lab Name: GCAL | Contract:

Lab Code: LA024 | Case No.: | SAS No.: | SDG No.: 214102205

Lab Sample ID: CCB | ICAL ID: 7

Lab Sample DESC: CCB FOR HBN 544258 [ICP/9568] | Preparation Blank Matrix: (soil / water)

Instrument ID: ICPMS1 | Date Analyzed: 11/03/14 | Time: 1433

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS
Antimony	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Arsenic	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Barium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Beryllium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cadmium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Calcium	500	U	ug/L	125	500	SW-846 6020A	MS
Chromium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cobalt	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Copper	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Iron	100	U	ug/L	25.0	100	SW-846 6020A	MS
Lead	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Magnesium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Manganese	5.00	U	ug/L	1.25	5.00	SW-846 6020A	MS
Molybdenum	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Nickel	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Potassium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Selenium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Silver	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Sodium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Thallium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Titanium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Vanadium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Zinc	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS

Lab Name: GCAL | Contract:

Lab Code: LA024 | Case No.: | SAS No.: | SDG No.: 214102205

Lab Sample ID: CCB | ICAL ID: 7

Lab Sample DESC: CCB FOR HBN 544258 [ICP/9568] | Preparation Blank Matrix: (soil / water)

Instrument ID: ICPMS1 | Date Analyzed: 11/03/14 | Time: 1609

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS
Antimony	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Arsenic	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Barium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Beryllium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cadmium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Calcium	500	U	ug/L	125	500	SW-846 6020A	MS
Chromium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cobalt	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Copper	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Iron	100	U	ug/L	25.0	100	SW-846 6020A	MS
Lead	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Magnesium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Manganese	5.00	U	ug/L	1.25	5.00	SW-846 6020A	MS
Molybdenum	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Nickel	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Potassium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Selenium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Silver	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Sodium	38.4	J	ug/L	25.0	100	SW-846 6020A	MS
Thallium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Titanium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Vanadium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Zinc	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Lab Sample ID: CCB ICAL ID: 7

Lab Sample DESC: CCB FOR HBN 544258 [ICP/9568] Preparation Blank Matrix: (soil / water)

Instrument ID: ICPMS1 Date Analyzed: 11/03/14 Time: 2138

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS
Antimony	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Arsenic	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Barium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Beryllium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cadmium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Calcium	500	U	ug/L	125	500	SW-846 6020A	MS
Chromium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cobalt	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Copper	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Iron	100	U	ug/L	25.0	100	SW-846 6020A	MS
Lead	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Magnesium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Manganese	5.00	U	ug/L	1.25	5.00	SW-846 6020A	MS
Molybdenum	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Nickel	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Potassium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Selenium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Silver	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Sodium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Thallium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Titanium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Vanadium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Zinc	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS

Lab Name: GCAL | Contract:

Lab Code: LA024 | Case No.: | SAS No.: | SDG No.: 214102205

Lab Sample ID: 1373150 | ICAL ID: 7

Lab Sample DESC: MB1373150 | Preparation Blank Matrix: (soil / water) Water

Instrument ID: ICPMS1 | Date Analyzed: 11/03/14 | Time: 2215

PREPARATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	5.00	U	ug/L	5.00	20.0	SW-846 6020A	MS
Antimony	0.50	U	ug/L	0.50	2.00	SW-846 6020A	MS
Arsenic	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Barium	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Beryllium	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cadmium	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Calcium	125	U	ug/L	125	500	SW-846 6020A	MS
Chromium	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cobalt	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Copper	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Iron	25.0	U	ug/L	25.0	100	SW-846 6020A	MS
Lead	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Magnesium	25.0	U	ug/L	25.0	100	SW-846 6020A	MS
Manganese	1.25	U	ug/L	1.25	5.00	SW-846 6020A	MS
Molybdenum	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Nickel	0.50	U	ug/L	0.50	2.00	SW-846 6020A	MS
Potassium	25.0	U	ug/L	25.0	100	SW-846 6020A	MS
Selenium	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Silver	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Sodium	25.0	U	ug/L	25.0	100	SW-846 6020A	MS
Thallium	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Titanium	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Vanadium	0.25	U	ug/L	0.25	1.00	SW-846 6020A	MS
Zinc	5.00	U	ug/L	5.00	20.0	SW-846 6020A	MS

Lab Name: GCAL | Contract:

Lab Code: LA024 | Case No.: | SAS No.: | SDG No.: 214102205

Lab Sample ID: CCB | ICAL ID: 7

Lab Sample DESC: CCB FOR HBN 544258 [ICP/9568] | Preparation Blank Matrix: (soil / water)

Instrument ID: ICPMS1 | Date Analyzed: 11/03/14 | Time: 2314

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS
Antimony	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Arsenic	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Barium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Beryllium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cadmium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Calcium	500	U	ug/L	125	500	SW-846 6020A	MS
Chromium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cobalt	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Copper	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Iron	100	U	ug/L	25.0	100	SW-846 6020A	MS
Lead	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Magnesium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Manganese	5.00	U	ug/L	1.25	5.00	SW-846 6020A	MS
Molybdenum	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Nickel	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Potassium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Selenium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Silver	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Sodium	47.4	J	ug/L	25.0	100	SW-846 6020A	MS
Thallium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Titanium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Vanadium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Zinc	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Lab Sample ID: CCB ICAL ID: 7

Lab Sample DESC: CCB FOR HBN 544258 [ICP/9568] Preparation Blank Matrix: (soil / water)

Instrument ID: ICPMS1 Date Analyzed: 11/04/14 Time: 0050

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS
Antimony	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Arsenic	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Barium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Beryllium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cadmium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Calcium	500	U	ug/L	125	500	SW-846 6020A	MS
Chromium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cobalt	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Copper	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Iron	100	U	ug/L	25.0	100	SW-846 6020A	MS
Lead	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Magnesium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Manganese	5.00	U	ug/L	1.25	5.00	SW-846 6020A	MS
Molybdenum	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Nickel	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Potassium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Selenium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Silver	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Sodium	31.1	J	ug/L	25.0	100	SW-846 6020A	MS
Thallium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Titanium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Vanadium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Zinc	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS

Lab Name: GCAL | Contract:

Lab Code LA024 | Case No.: | SAS No.: | SDG No.: 214102205

Lab Sample ID: ICB | ICAL ID: 8

Lab Sample DESC: ICB FOR HBN 544453 [ICP/9571] | Preparation Blank Matrix: (soil / water)

Instrument ID: ICPMS2 | Date Analyzed: 11/03/14 | Time: 1036

INITIAL CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS
Antimony	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Arsenic	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Barium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Beryllium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cadmium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Calcium	500	U	ug/L	125	500	SW-846 6020A	MS
Chromium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cobalt	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Copper	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Iron	100	U	ug/L	25.0	100	SW-846 6020A	MS
Lead	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Magnesium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Manganese	5.00	U	ug/L	1.25	5.00	SW-846 6020A	MS
Molybdenum	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Nickel	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Potassium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Selenium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Silver	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Sodium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Thallium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Titanium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Vanadium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Zinc	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS

Lab Name: GCAL | Contract:

Lab Code: LA024 | Case No.: | SAS No.: | SDG No.: 214102205

Lab Sample ID: CCB | ICAL ID: 8

Lab Sample DESC: CCB FOR HBN 544453 [ICP/9571] | Preparation Blank Matrix: (soil / water)

Instrument ID: ICPMS2 | Date Analyzed: 11/03/14 | Time: 2038

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS
Antimony	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Arsenic	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Barium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Beryllium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cadmium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Calcium	500	U	ug/L	125	500	SW-846 6020A	MS
Chromium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cobalt	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Copper	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Iron	100	U	ug/L	25.0	100	SW-846 6020A	MS
Lead	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Magnesium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Manganese	5.00	U	ug/L	1.25	5.00	SW-846 6020A	MS
Molybdenum	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Nickel	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Potassium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Selenium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Silver	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Sodium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Thallium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Titanium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Vanadium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Zinc	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Lab Sample ID: CCB ICAL ID: 8

Lab Sample DESC: CCB FOR HBN 544453 [ICP/9571] Preparation Blank Matrix: (soil / water)

Instrument ID: ICPMS2 Date Analyzed: 11/03/14 Time: 2100

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS
Antimony	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Arsenic	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Barium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Beryllium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cadmium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Calcium	500	U	ug/L	125	500	SW-846 6020A	MS
Chromium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cobalt	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Copper	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Iron	100	U	ug/L	25.0	100	SW-846 6020A	MS
Lead	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Magnesium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Manganese	5.00	U	ug/L	1.25	5.00	SW-846 6020A	MS
Molybdenum	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Nickel	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Potassium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Selenium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Silver	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Sodium	60.2	J	ug/L	25.0	100	SW-846 6020A	MS
Thallium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Titanium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Vanadium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Zinc	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS

Lab Name: GCAL | Contract:

Lab Code: LA024 | Case No.: | SAS No.: | SDG No.: 214102205

Lab Sample ID: ICB | ICAL ID: 10

Lab Sample DESC: ICB FOR HBN 544547 [ICP/9574] | Preparation Blank Matrix: (soil / water)

Instrument ID: ICPMS2 | Date Analyzed: 11/06/14 | Time: 1108

INITIAL CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS
Antimony	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Arsenic	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Barium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Beryllium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cadmium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Calcium	500	U	ug/L	125	500	SW-846 6020A	MS
Chromium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cobalt	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Copper	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Iron	100	U	ug/L	25.0	100	SW-846 6020A	MS
Lead	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Magnesium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Manganese	5.00	U	ug/L	1.25	5.00	SW-846 6020A	MS
Molybdenum	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Nickel	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Potassium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Selenium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Silver	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Sodium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Thallium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Titanium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Vanadium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Zinc	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS

Lab Name: GCAL
Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Lab Sample ID: CCB
ICAL ID: 10

Lab Sample DESC: CCB FOR HBN 544547 [ICP/9574]
Preparation Blank Matrix: (soil / water)

Instrument ID: ICPMS2
Date Analyzed: 11/06/14 Time: 1501

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS
Antimony	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Arsenic	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Barium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Beryllium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cadmium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Calcium	500	U	ug/L	125	500	SW-846 6020A	MS
Chromium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cobalt	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Copper	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Iron	100	U	ug/L	25.0	100	SW-846 6020A	MS
Lead	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Magnesium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Manganese	5.00	U	ug/L	1.25	5.00	SW-846 6020A	MS
Molybdenum	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Nickel	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Potassium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Selenium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Silver	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Sodium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Thallium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Titanium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Vanadium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Zinc	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS

Lab Name: GCAL | Contract:

Lab Code: LA024 | Case No.: | SAS No.: | SDG No.: 214102205

Lab Sample ID: CCB | ICAL ID: 10

Lab Sample DESC: CCB FOR HBN 544547 [ICP/9574] | Preparation Blank Matrix: (soil / water)

Instrument ID: ICPMS2 | Date Analyzed: 11/06/14 | Time: 1533

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS
Antimony	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Arsenic	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Barium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Beryllium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cadmium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Calcium	500	U	ug/L	125	500	SW-846 6020A	MS
Chromium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Cobalt	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Copper	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Iron	100	U	ug/L	25.0	100	SW-846 6020A	MS
Lead	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Magnesium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Manganese	5.00	U	ug/L	1.25	5.00	SW-846 6020A	MS
Molybdenum	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Nickel	2.00	U	ug/L	0.50	2.00	SW-846 6020A	MS
Potassium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Selenium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Silver	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Sodium	100	U	ug/L	25.0	100	SW-846 6020A	MS
Thallium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Titanium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Vanadium	1.00	U	ug/L	0.25	1.00	SW-846 6020A	MS
Zinc	20.0	U	ug/L	5.00	20.0	SW-846 6020A	MS

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Lab Sample ID: ICB ICAL ID: 13

Lab Sample DESC: ICB FOR HBN 543609 [ICP/9553] Preparation Blank Matrix: (soil / water)

Instrument ID: ICPMS2 Date Analyzed: 10/23/14 Time: 0944

INITIAL CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	20.0	U	ug/L	5.00	20.0	SW-846 6020A Dissolved	MS
Antimony	2.00	U	ug/L	0.50	2.00	SW-846 6020A Dissolved	MS
Arsenic	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Barium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Beryllium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Cadmium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Calcium	500	U	ug/L	125	500	SW-846 6020A Dissolved	MS
Chromium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Cobalt	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Copper	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Iron	100	U	ug/L	25.0	100	SW-846 6020A Dissolved	MS
Lead	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Magnesium	100	U	ug/L	25.0	100	SW-846 6020A Dissolved	MS
Manganese	5.00	U	ug/L	1.25	5.00	SW-846 6020A Dissolved	MS
Molybdenum	0.34	J	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Nickel	2.00	U	ug/L	0.50	2.00	SW-846 6020A Dissolved	MS
Potassium	100	U	ug/L	25.0	100	SW-846 6020A Dissolved	MS
Selenium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Silver	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Sodium	100	U	ug/L	25.0	100	SW-846 6020A Dissolved	MS
Thallium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Titanium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Vanadium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Zinc	20.0	U	ug/L	5.00	20.0	SW-846 6020A Dissolved	MS

Lab Name: GCAL | Contract:

Lab Code: LA024 | Case No.: | SAS No.: | SDG No.: 214102205

Lab Sample ID: 1372696 | ICAL ID: 13

Lab Sample DESC: MB1372696 | Preparation Blank Matrix: (soil / water) Water

Instrument ID: ICPMS2 | Date Analyzed: 10/23/14 | Time: 1011

PREPARATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	5.00	U	ug/L	5.00	20.0	SW-846 6020A Dissolved	MS
Antimony	0.50	U	ug/L	0.50	2.00	SW-846 6020A Dissolved	MS
Arsenic	0.25	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Barium	0.25	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Beryllium	0.25	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Cadmium	0.25	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Calcium	125	U	ug/L	125	500	SW-846 6020A Dissolved	MS
Chromium	0.25	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Cobalt	0.25	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Copper	0.25	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Iron	25.0	U	ug/L	25.0	100	SW-846 6020A Dissolved	MS
Lead	0.40	J	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Magnesium	25.0	U	ug/L	25.0	100	SW-846 6020A Dissolved	MS
Manganese	1.25	U	ug/L	1.25	5.00	SW-846 6020A Dissolved	MS
Molybdenum	0.25	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Nickel	0.50	U	ug/L	0.50	2.00	SW-846 6020A Dissolved	MS
Potassium	25.0	U	ug/L	25.0	100	SW-846 6020A Dissolved	MS
Selenium	0.25	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Silver	0.25	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Sodium	25.0	U	ug/L	25.0	100	SW-846 6020A Dissolved	MS
Thallium	0.25	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Titanium	0.25	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Vanadium	0.25	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Zinc	5.00	U	ug/L	5.00	20.0	SW-846 6020A Dissolved	MS

Lab Name: GCAL | Contract:

Lab Code LA024 | Case No.: | SAS No.: | SDG No.: 214102205

Lab Sample ID: CCB | ICAL ID: 13

Lab Sample DESC: CCB FOR HBN 543609 [ICP/9553] | Preparation Blank Matrix: (soil / water)

Instrument ID: ICPMS2 | Date Analyzed: 10/23/14 | Time: 1103

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	20.0	U	ug/L	5.00	20.0	SW-846 6020A Dissolved	MS
Antimony	2.00	U	ug/L	0.50	2.00	SW-846 6020A Dissolved	MS
Arsenic	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Barium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Beryllium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Cadmium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Calcium	500	U	ug/L	125	500	SW-846 6020A Dissolved	MS
Chromium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Cobalt	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Copper	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Iron	100	U	ug/L	25.0	100	SW-846 6020A Dissolved	MS
Lead	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Magnesium	100	U	ug/L	25.0	100	SW-846 6020A Dissolved	MS
Manganese	5.00	U	ug/L	1.25	5.00	SW-846 6020A Dissolved	MS
Molybdenum	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Nickel	2.00	U	ug/L	0.50	2.00	SW-846 6020A Dissolved	MS
Potassium	100	U	ug/L	25.0	100	SW-846 6020A Dissolved	MS
Selenium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Silver	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Sodium	100	U	ug/L	25.0	100	SW-846 6020A Dissolved	MS
Thallium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Titanium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Vanadium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Zinc	20.0	U	ug/L	5.00	20.0	SW-846 6020A Dissolved	MS

Lab Name: GCAL | Contract:

Lab Code: LA024 | Case No.: | SAS No.: | SDG No.: 214102205

Lab Sample ID: ICB | ICAL ID: 17

Lab Sample DESC: ICB FOR HBN 544364 [ICP/9569] | Preparation Blank Matrix: (soil / water)

Instrument ID: ICPMS2 | Date Analyzed: 11/04/14 | Time: 1125

INITIAL CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	20.0	U	ug/L	5.00	20.0	SW-846 6020A Dissolved	MS
Antimony	2.00	U	ug/L	0.50	2.00	SW-846 6020A Dissolved	MS
Arsenic	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Barium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Beryllium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Cadmium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Calcium	500	U	ug/L	125	500	SW-846 6020A Dissolved	MS
Chromium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Cobalt	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Copper	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Iron	100	U	ug/L	25.0	100	SW-846 6020A Dissolved	MS
Lead	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Magnesium	100	U	ug/L	25.0	100	SW-846 6020A Dissolved	MS
Manganese	5.00	U	ug/L	1.25	5.00	SW-846 6020A Dissolved	MS
Molybdenum	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Nickel	2.00	U	ug/L	0.50	2.00	SW-846 6020A Dissolved	MS
Potassium	100	U	ug/L	25.0	100	SW-846 6020A Dissolved	MS
Selenium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Silver	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Sodium	100	U	ug/L	25.0	100	SW-846 6020A Dissolved	MS
Thallium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Titanium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Vanadium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Zinc	20.0	U	ug/L	5.00	20.0	SW-846 6020A Dissolved	MS

Lab Name: GCAL
Contract:
Lab Code LA024 Case No.:
SAS No.: SDG No.: 214102205
Lab Sample ID: 1373162
ICAL ID: 17
Lab Sample DESC: MB1373162
Preparation Blank Matrix: (soil / water) Water
Instrument ID: ICPMS2
Date Analyzed: 11/04/14 Time: 1144

PREPARATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	5.00	U	ug/L	5.00	20.0	SW-846 6020A Dissolved	MS
Antimony	0.50	U	ug/L	0.50	2.00	SW-846 6020A Dissolved	MS
Arsenic	0.25	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Barium	0.25	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Beryllium	0.25	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Cadmium	0.25	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Calcium	125	U	ug/L	125	500	SW-846 6020A Dissolved	MS
Chromium	0.25	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Cobalt	0.25	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Copper	0.25	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Iron	25.0	U	ug/L	25.0	100	SW-846 6020A Dissolved	MS
Lead	0.25	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Magnesium	25.0	U	ug/L	25.0	100	SW-846 6020A Dissolved	MS
Manganese	1.25	U	ug/L	1.25	5.00	SW-846 6020A Dissolved	MS
Molybdenum	0.25	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Nickel	0.50	U	ug/L	0.50	2.00	SW-846 6020A Dissolved	MS
Potassium	25.0	U	ug/L	25.0	100	SW-846 6020A Dissolved	MS
Selenium	0.25	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Silver	0.25	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Sodium	25.0	U	ug/L	25.0	100	SW-846 6020A Dissolved	MS
Thallium	0.25	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Titanium	0.25	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Vanadium	0.25	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Zinc	5.00	U	ug/L	5.00	20.0	SW-846 6020A Dissolved	MS

Lab Name: GCAL | Contract:

Lab Code LA024 | Case No.: | SAS No.: | SDG No.: 214102205

Lab Sample ID: CCB | ICAL ID: 17

Lab Sample DESC: CCB FOR HBN 544364 [ICP/9569] | Preparation Blank Matrix: (soil / water)

Instrument ID: ICPMS2 | Date Analyzed: 11/04/14 | Time: 1202

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	20.0	U	ug/L	5.00	20.0	SW-846 6020A Dissolved	MS
Antimony	2.00	U	ug/L	0.50	2.00	SW-846 6020A Dissolved	MS
Arsenic	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Barium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Beryllium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Cadmium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Calcium	500	U	ug/L	125	500	SW-846 6020A Dissolved	MS
Chromium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Cobalt	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Copper	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Iron	100	U	ug/L	25.0	100	SW-846 6020A Dissolved	MS
Lead	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Magnesium	100	U	ug/L	25.0	100	SW-846 6020A Dissolved	MS
Manganese	5.00	U	ug/L	1.25	5.00	SW-846 6020A Dissolved	MS
Molybdenum	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Nickel	2.00	U	ug/L	0.50	2.00	SW-846 6020A Dissolved	MS
Potassium	100	U	ug/L	25.0	100	SW-846 6020A Dissolved	MS
Selenium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Silver	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Sodium	100	U	ug/L	25.0	100	SW-846 6020A Dissolved	MS
Thallium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Titanium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Vanadium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Zinc	20.0	U	ug/L	5.00	20.0	SW-846 6020A Dissolved	MS

Lab Name: GCAL | Contract:

Lab Code: LA024 | Case No.: | SAS No.: | SDG No.: 214102205

Lab Sample ID: CCB | ICAL ID: 17

Lab Sample DESC: CCB FOR HBN 544364 [ICP/9569] | Preparation Blank Matrix: (soil / water)

Instrument ID: ICPMS2 | Date Analyzed: 11/04/14 | Time: 1232

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	20.0	U	ug/L	5.00	20.0	SW-846 6020A Dissolved	MS
Antimony	2.00	U	ug/L	0.50	2.00	SW-846 6020A Dissolved	MS
Arsenic	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Barium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Beryllium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Cadmium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Calcium	500	U	ug/L	125	500	SW-846 6020A Dissolved	MS
Chromium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Cobalt	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Copper	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Iron	100	U	ug/L	25.0	100	SW-846 6020A Dissolved	MS
Lead	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Magnesium	100	U	ug/L	25.0	100	SW-846 6020A Dissolved	MS
Manganese	5.00	U	ug/L	1.25	5.00	SW-846 6020A Dissolved	MS
Molybdenum	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Nickel	2.00	U	ug/L	0.50	2.00	SW-846 6020A Dissolved	MS
Potassium	100	U	ug/L	25.0	100	SW-846 6020A Dissolved	MS
Selenium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Silver	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Sodium	59.9	J	ug/L	25.0	100	SW-846 6020A Dissolved	MS
Thallium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Titanium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Vanadium	1.00	U	ug/L	0.25	1.00	SW-846 6020A Dissolved	MS
Zinc	20.0	U	ug/L	5.00	20.0	SW-846 6020A Dissolved	MS

Lab Name: GCAL
Contract:
Lab Code LA024 Case No.:
SAS No.: SDG No.: 214102205
Lab Sample ID: ICB
ICAL ID: 1
Lab Sample DESC: ICB FOR HBN 543612 [HG/6217]
Preparation Blank Matrix: (soil / water)
Instrument ID: FIMS1
Date Analyzed: 10/23/14 Time: 1432

INITIAL CALIBRATION BLANK

Analyte	*Conc.*	*C*	*Units*	*MDL*	*PQL*	*Method*	*Type*
Mercury	0.00020	U	mg/L	0.00007	0.00020	SW-846 7470A	AV

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Lab Sample ID: 1372876 ICAL ID: 1

Lab Sample DESC: MB1372876 Preparation Blank Matrix: (soil / water) Water

Instrument ID: FIMS1 Date Analyzed: 10/23/14 Time: 1437

PREPARATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Mercury	0.070	U	ug/L	0.070	0.20	SW-846 7470A	AV

Lab Name: GCAL
Contract:
Lab Code LA024 Case No.:
SAS No.: SDG No.: 214102205
Lab Sample ID: CCB
ICAL ID: 1
Lab Sample DESC: CCB FOR HBN 543612 [HG/6217]
Preparation Blank Matrix: (soil / water)
Instrument ID: FIMS1
Date Analyzed: 10/23/14 Time: 1458

CONTINUING CALIBRATION BLANK

Analyte	*Conc.*	*C*	*Units*	*MDL*	*PQL*	*Method*	*Type*
Mercury	0.00020	U	mg/L	0.00007	0.00020	SW-846 7470A	AV

Lab Name: GCAL | Contract:

Lab Code: LA024 | Case No.: | SAS No.: | SDG No.: 214102205

Lab Sample ID: CCB | ICAL ID: 1

Lab Sample DESC: CCB FOR HBN 543612 [HG/6217] | Preparation Blank Matrix: (soil / water)

Instrument ID: FIMS1 | Date Analyzed: 10/23/14 | Time: 1519

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Mercury	0.00020	U	mg/L	0.00007	0.00020	SW-846 7470A	AV

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Lab Sample ID: ICB ICAL ID: 11

Lab Sample DESC: ICB FOR HBN 543829 [HG/6220] Preparation Blank Matrix: (soil / water)

Instrument ID: FIMS1 Date Analyzed: 10/27/14 Time: 1430

INITIAL CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Mercury	0.00020	U	mg/L	0.00007	0.00020	SW-846 7470A Dissolved	AV

Lab Name: GCAL | Contract:

Lab Code: LA024 | Case No.: | SAS No.: | SDG No.: 214102205

Lab Sample ID: 1373154 | ICAL ID: 11

Lab Sample DESC: MB1373154 | Preparation Blank Matrix: (soil / water) Water

Instrument ID: FIMS1 | Date Analyzed: 10/27/14 | Time: 1433

PREPARATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Mercury	0.070	U	ug/L	0.070	0.20	SW-846 7470A Dissolved	AV

Lab Name: GCAL
Contract:

Lab Code LA024 Case No.:
SAS No.: SDG No.: 214102205

Lab Sample ID: CCB
ICAL ID: 11

Lab Sample DESC: CCB FOR HBN 543829 [HG/6220]
Preparation Blank Matrix: (soil / water)

Instrument ID: FIMS1
Date Analyzed: 10/27/14 Time: 1451

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Mercury	0.00020	U	mg/L	0.00007	0.00020	SW-846 7470A Dissolved	AV

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Lab Sample ID: CCB ICAL ID: 11

Lab Sample DESC: CCB FOR HBN 543829 [HG/6220] Preparation Blank Matrix: (soil / water)

Instrument ID: FIMS1 Date Analyzed: 10/27/14 Time: 1512

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Mercury	0.00020	U	mg/L	0.00007	0.00020	SW-846 7470A Dissolved	AV

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Lab Sample ID: CCB ICAL ID: 11

Lab Sample DESC: CCB FOR HBN 543829 [HG/6220] Preparation Blank Matrix: (soil / water)

Instrument ID: FIMS1 Date Analyzed: 10/27/14 Time: 1533

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Mercury	0.00020	U	mg/L	0.00007	0.00020	SW-846 7470A Dissolved	AV

Lab Name: GCAL
Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Lab Sample ID: ICB
ICAL ID: 2

Lab Sample DESC: ICB FOR HBN 543882 [HG/6222]
Preparation Blank Matrix: (soil / water)

Instrument ID: FIMS1
Date Analyzed: 10/28/14 Time: 1120

INITIAL CALIBRATION BLANK

Analyte	*Conc.*	*C*	*Units*	*MDL*	*PQL*	*Method*	*Type*
Mercury	0.00007	J	mg/L	0.00007	0.00020	SW-846 7470A	AV

Lab Name: GCAL Contract:

Lab Code LA024 Case No.: SAS No.: SDG No.: 214102205

Lab Sample ID: 1373158 ICAL ID: 2

Lab Sample DESC: MB1373158 Preparation Blank Matrix: (soil / water) Water

Instrument ID: FIMS1 Date Analyzed: 10/28/14 Time: 1122

PREPARATION BLANK

Analyte	*Conc.*	*C*	*Units*	*MDL*	*PQL*	*Method*	*Type*
Mercury	0.070	U	ug/L	0.070	0.20	SW-846 7470A	AV

Lab Name: GCAL
Contract:

Lab Code LA024 Case No.:
SAS No.: SDG No.: 214102205

Lab Sample ID: CCB
ICAL ID: 2

Lab Sample DESC: CCB FOR HBN 543882 [HG/6222]
Preparation Blank Matrix: (soil / water)

Instrument ID: FIMS1
Date Analyzed: 10/28/14 Time: 1149

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Mercury	0.00020	U	mg/L	0.00007	0.00020	SW-846 7470A	AV

Lab Name: GCAL | Contract:

Lab Code: LA024 | Case No.: | SAS No.: | SDG No.: 214102205

Lab Sample ID: CCB | ICAL ID: 2

Lab Sample DESC: CCB FOR HBN 543882 [HG/6222] | Preparation Blank Matrix: (soil / water)

Instrument ID: FIMS1 | Date Analyzed: 10/28/14 | Time: 1214

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Mercury	0.00020	U	mg/L	0.00007	0.00020	SW-846 7470A	AV

Lab Name: GCAL | Contract:

Lab Code: LA024 | Case No.: | SAS No.: | SDG No.: 214102205

Lab Sample ID: CCB | ICAL ID: 2

Lab Sample DESC: CCB FOR HBN 543882 [HG/6222] | Preparation Blank Matrix: (soil / water)

Instrument ID: FIMS1 | Date Analyzed: 10/28/14 | Time: 1236

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Mercury	0.00020	U	mg/L	0.00007	0.00020	SW-846 7470A	AV

Lab Name: GCAL
Contract:

Lab Code LA024 Case No.:
SAS No.: SDG No.: 214102205

Lab Sample ID: 1373489
ICAL ID: 2

Lab Sample DESC: MB1373489
Preparation Blank Matrix: (soil / water) Water

Instrument ID: FIMS1
Date Analyzed: 10/28/14 Time: 1241

PREPARATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Mercury	0.070	U	ug/L	0.070	0.20	SW-846 7470A	AV

Lab Name: GCAL | Contract:

Lab Code: LA024 | Case No.: | SAS No.: | SDG No.: 214102205

Lab Sample ID: CCB | ICAL ID: 2

Lab Sample DESC: CCB FOR HBN 543882 [HG/6222] | Preparation Blank Matrix: (soil / water)

Instrument ID: FIMS1 | Date Analyzed: 10/28/14 | Time: 1309

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Mercury	0.00020	U	mg/L	0.00007	0.00020	SW-846 7470A	AV

Lab Name: GCAL | Contract:

Lab Code: LA024 | Case No.: | SAS No.: | SDG No.: 214102205

Lab Sample ID: CCB | ICAL ID: 2

Lab Sample DESC: CCB FOR HBN 543882 [HG/6222] | Preparation Blank Matrix: (soil / water)

Instrument ID: FIMS1 | Date Analyzed: 10/28/14 | Time: 1338

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Mercury	0.00020	U	mg/L	0.00007	0.00020	SW-846 7470A	AV

Lab Name: GCAL | Contract:

Lab Code: LA024 | Case No.: | SAS No.: | SDG No.: 214102205

Lab Sample ID: CCB | ICAL ID: 2

Lab Sample DESC: CCB FOR HBN 543882 [HG/6222] | Preparation Blank Matrix: (soil / water)

Instrument ID: FIMS1 | Date Analyzed: 10/28/14 | Time: 1359

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Mercury	0.00020	U	mg/L	0.00007	0.00020	SW-846 7470A	AV

ICP INTERFERENCE CHECK SAMPLE

Lab Name: GCAL Contract: SDG No.: 214102205

Lab Code LA024 Case No.: SAS No.: Analysis Batch 543993

ICP ID Number: ICPMS1 ICS Source: 243-90-1 Agilent~243-91-21 HIGH PURITY

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol. A	Sol. AB	Sol. A	Sol. AB	%R	Sol. A	Sol. AB	%R
Aluminum	1000	1000	976	961	96	859	838	84
Antimony	0	0	0.031	-0.0040		0.057	-0.037	
Arsenic	0	10.0	0.0050	10.0	100	-0.0040	10.4	104
Barium	0	0	0.16	0.16		0.14	0.14	
Beryllium	0	0	0.0030	0.014		0.016	0.022	
Boron	0	20.0	0.44	19.4	97	0.38	16.7	84
Cadmium	0	10.0	0.016	9.81	98	0.018	9.70	97
Calcium	3000	3000	2860	2850	95	2840	2760	92
Chromium	0	20.0	0.034	20.7	104	0.038	21.0	105
Cobalt	0	20.0	0.040	22.0	110	0.035	22.8	114
Copper	0	20.0	0.023	20.6	103	0.0090	21.2	106
Iron	2500	2500	2470	2410	96	2530	2480	99
Lead	0	0	0.0	0.0040		0.0020	0.0020	
Lithium	0	20.0	-0.16	21.2	106	-2.5	14.5	72
Magnesium	1000	1000	955	953	95	876	846	85
Manganese	0	20.0	0.20	20.4	102	0.22	20.7	104
Molybdenum	20.0	20.0	19.1	18.8	94	18.5	18.0	90
Nickel	0	20.0	0.051	20.3	102	0.056	21.2	106
Potassium	1000	1000	952	949	95	913	875	88
Selenium	0	10.0	0.13	10.1	101	0.088	9.22	92
Silicon	0	1000	-5.4	4.63	0	-110	-120	-12
Silver	0	5.00	0.020	5.23	105	0.020	5.28	106
Sodium	2500	2500	2460	2460	98	2250	2190	88
Strontium	0	10.0	0.034	9.87	99	0.012	10.3	103
Thallium	0	0	-0.015	-0.015		-0.0060	-0.012	
Tin	0	10.0	-0.0090	9.35	94	-0.027	9.55	96
Titanium	20.0	20.0	19.7	19.2	96	19.0	17.5	88
Vanadium	0	20.0	-0.010	20.0	100	-0.027	20.2	101
Zinc	0	10.0	-0.19	10.4	104	-0.27	10.6	106
Zirconium	0	20.0	0.0090	19.4	97	0.030	17.4	87

ICP INTERFERENCE CHECK SAMPLE

-

Lab Name: GCAL Contract: SDG No.: 214102205

Lab Code LA024 Case No.: SAS No.: Analysis Batch 544053

ICP ID Number: ICPMS1 ICS Source: 243-90-1 Agilent~243-91-21 HIGH PURITY

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol. A	Sol. AB	Sol. A	Sol. AB	%R	Sol. A	Sol. AB	%R
Aluminum	1000	1000	969	962	96	974	956	96
Antimony	0	0	0.045	0.022		0.0060	0.0060	
Arsenic	0	10.0	0.012	9.92	99	0.0030	10.2	102
Barium	0	0	0.16	0.16		0.17	0.16	
Beryllium	0	0	0.0040	0.0040		0.0090	0.0020	
Boron	0	20.0	0.90	21.0	105	-0.13	20.3	102
Cadmium	0	10.0	0.024	9.64	96	0.022	9.64	96
Calcium	3000	3000	2850	2890	96	2880	2860	95
Chromium	0	20.0	0.036	20.6	103	0.036	20.9	104
Cobalt	0	20.0	0.033	21.9	110	0.040	22.2	111
Copper	0	20.0	-0.0080	20.4	102	0.029	20.9	104
Iron	2500	2500	2460	2450	98	2510	2460	98
Lead	0	0	0.0070	0.0070		0.0070	0.0070	
Lithium	0	20.0	0.64	23.3	116	0.54	20.9	104
Magnesium	1000	1000	951	937	94	954	936	94
Manganese	0	20.0	0.20	20.8	104	0.22	21.3	106
Molybdenum	20.0	20.0	18.8	18.5	92	18.6	18.2	91
Nickel	0	20.0	0.069	20.4	102	0.063	20.7	104
Potassium	1000	1000	946	931	93	956	941	94
Selenium	0	10.0	0.14	9.99	100	0.11	10.1	101
Silicon	0	1000	-7.6	-3.9	0	-32	-19	-2
Silver	0	5.00	0.022	5.33	107	0.021	5.35	107
Sodium	2500	2500	2430	2390	96	2500	2420	97
Strontium	0	10.0	-0.0030	9.99	100	0.010	10.4	104
Thallium	0	0	-0.027	-0.030		-0.032	-0.031	
Tin	0	10.0	-0.010	9.48	95	-0.019	9.62	96
Titanium	20.0	20.0	19.2	18.4	92	18.7	19.2	96
Vanadium	0	20.0	0.0030	19.8	99	0.0010	20.2	101
Zinc	0	10.0	-0.38	10.0	100	-0.33	10.4	104
Zirconium	0	20.0	0.0080	16.5	82	0.0070	16.4	82

ICP INTERFERENCE CHECK SAMPLE

Lab Name: GCAL Contract: SDG No.: 214102205

Lab Code LA024 Case No.: SAS No.: Analysis Batch 544053

ICP ID Number: ICPMS1 ICS Source: 243-90-1 Agilent~243-91-21 HIGH PURITY

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol. A	Sol. AB	Sol. A	Sol. AB	%R	Sol. A	Sol. AB	%R
Aluminum	1000	1000				916	902	90
Antimony	0	0				0.0070	0.0020	
Arsenic	0	10.0				0.0040	10.2	102
Barium	0	0				0.19	0.19	
Beryllium	0	0				-0.0090	-0.012	
Boron	0	20.0				1.24	19.5	98
Cadmium	0	10.0				0.024	9.52	95
Calcium	3000	3000				2770	2820	94
Chromium	0	20.0				0.035	20.6	103
Cobalt	0	20.0				0.033	21.9	110
Copper	0	20.0				0.016	20.6	103
Iron	2500	2500				2510	2430	97
Lead	0	0				0.0080	0.0090	
Lithium	0	20.0				-1.7	16.2	81
Magnesium	1000	1000				914	900	90
Manganese	0	20.0				0.28	20.9	104
Molybdenum	20.0	20.0				18.6	18.4	92
Nickel	0	20.0				0.060	20.6	103
Potassium	1000	1000				918	914	91
Selenium	0	10.0				0.079	9.96	100
Silicon	0	1000				-44	-14	-1
Silver	0	5.00				0.015	5.24	105
Sodium	2500	2500				2380	2330	93
Strontium	0	10.0				0.035	10.2	102
Thallium	0	0				-0.036	-0.034	
Tin	0	10.0				0.0010	9.59	96
Titanium	20.0	20.0				18.4	18.8	94
Vanadium	0	20.0				0.012	20.1	100
Zinc	0	10.0				-0.30	10.1	101
Zirconium	0	20.0				0.0070	16.6	83

ICP INTERFERENCE CHECK SAMPLE

Lab Name: GCAL Contract: SDG No.: 214102205

Lab Code LA024 Case No.: SAS No.: Analysis Batch 544138

ICP ID Number: ICPMS1 ICS Source: 243-90-1 Agilent~243-91-21 HIGH PURITY

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol. A	Sol. AB	Sol. A	Sol. AB	%R	Sol. A	Sol. AB	%R
Aluminum	1000	1000	978	969	97	954	947	95
Antimony	0	0	0.079	0.20		0.20	0.20	
Arsenic	0	10.0	0.012	9.57	96	0.0040	9.76	98
Barium	0	0	0.20	0.34		0.18	0.28	
Beryllium	0	0	0.038	0.15		0.035	0.17	
Boron	0	20.0	1.71	21.0	105	0.80	21.1	106
Cadmium	0	10.0	0.029	9.54	95	0.032	9.56	96
Calcium	3000	3000	2900	3030	101	2900	3070	102
Chromium	0	20.0	0.033	18.8	94	0.032	19.4	97
Cobalt	0	20.0	0.044	19.3	96	0.048	20.0	100
Copper	0	20.0	-0.11	19.4	97	-0.081	20.0	100
Iron	2500	2500	2520	2470	99	2550	2540	102
Lead	0	0	0.011	0.16		0.016	0.14	
Lithium	0	20.0	-1.9	19.7	98	-1.1	21.0	105
Magnesium	1000	1000	966	959	96	955	968	97
Manganese	0	20.0	0.22	20.6	103	0.22	20.9	104
Molybdenum	20.0	20.0	18.8	18.7	94	18.8	18.8	94
Nickel	0	20.0	-0.012	19.4	97	-0.0030	20.3	102
Potassium	1000	1000	963	977	98	956	973	97
Selenium	0	10.0	0.22	9.98	100	0.19	9.79	98
Silicon	0	1000	-23	1060	106	-24	932	93
Silver	0	5.00	0.021	5.11	102	0.022	5.27	105
Sodium	2500	2500	2470	2420	97	2490	2490	100
Strontium	0	10.0	0.037	9.73	97	0.037	10.1	101
Thallium	0	0	0.0030	0.15		0.0080	0.15	
Tin	0	10.0	0.032	9.25	92	0.033	9.61	96
Titanium	20.0	20.0	18.6	19.0	95	21.1	19.9	100
Vanadium	0	20.0	0.012	18.5	92	0.014	18.9	94
Zinc	0	10.0	0.44	14.5	145	0.44	14.5	145
Zirconium	0	20.0	0.012	16.6	83	0.022	16.8	84

ICP INTERFERENCE CHECK SAMPLE

Lab Name: GCAL Contract: SDG No.: 214102205

Lab Code LA024 Case No.: SAS No.: Analysis Batch: 544225

ICP ID Number: ICPMS2 ICS Source: 243-93-10 Agilent~243-93-11 HIGH PURITY

Concentration Units: mg/L

Analyte	True		Initial Found			Final Found		
	Sol. A	Sol. AB	Sol. A	Sol. AB	%R	Sol. A	Sol. AB	%R
Aluminum	1000	1000	1030	1030	103			
Antimony	0	0	0.031	0.027				
Arsenic	0	10.0	0.024	10.1	101			
Barium	0	0	0.17	0.19				
Beryllium	0	0	0.0080	0.010				
Boron	0	20.0	0.62	20.6	103			
Cadmium	0	10.0	0.043	10.0	100			
Calcium	3000	3000	3040	3100	103			
Chromium	0	20.0	0.053	20.7	104			
Cobalt	0	20.0	0.048	21.2	106			
Copper	0	20.0	0.0010	21.0	105			
Iron	2500	2500	2540	2580	103			
Lead	0	0	0.0080	0.0060				
Lithium	0	20.0	0.10	21.5	108			
Magnesium	1000	1000	1040	1040	104			
Manganese	0	20.0	0.17	19.9	100			
Molybdenum	20.0	20.0	19.6	19.5	98			
Nickel	0	20.0	0.047	21.4	107			
Potassium	1000	1000	987	1000	100			
Selenium	0	10.0	0.10	9.41	94			
Silicon	0	1000	-300	673	67			
Silver	0	5.00	0.011	4.89	98			
Sodium	2500	2500	2650	2680	107			
Strontium	0	10.0	0.020	10.4	104			
Thallium	0	0	0.0050	0.0080				
Tin	0	10.0	-0.0040	10.0	100			
Titanium	20.0	20.0	19.9	20.6	103			
Vanadium	0	20.0	-0.020	20.2	101			
Zinc	0	20.0	-1.0	17.3	86			
Zirconium	0	20.0	0.0070	19.7	98			

ICP INTERFERENCE CHECK SAMPLE

Lab Name: GCAL Contract: SDG No.: 214102205

Lab Code LA024 Case No.: SAS No.: Analysis Batch 544258

ICP ID Number: ICPMS1 ICS Source: 243-93-10 Agilent~243-93-11 HIGH PURITY

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol. A	Sol. AB	Sol. A	Sol. AB	%R	Sol. A	Sol. AB	%R
Aluminum	1000	1000	993	1010	101	948	947	95
Antimony	0	0	0.038	0.025		0.066	0.013	
Arsenic	0	10.0	0.0060	10.2	102	0.011	10.4	104
Barium	0	0	0.18	0.16		0.17	0.18	
Beryllium	0	0	-0.0070	-0.0010		-0.012	-0.0060	
Boron	0	20.0	0.090	21.1	106	-0.62	17.5	88
Cadmium	0	10.0	0.028	10.2	102	0.029	9.88	99
Calcium	3000	3000	2970	3130	104	3000	3030	101
Chromium	0	20.0	0.031	20.5	102	0.030	20.2	101
Cobalt	0	20.0	0.045	20.8	104	0.046	20.7	104
Copper	0	20.0	0.0050	21.2	106	0.010	20.5	102
Iron	2500	2500	2550	2600	104	2560	2540	102
Lead	0	0	0.0060	0.0060		0.0030	-0.0010	
Lithium	0	20.0	1.31	22.5	112	-1.3	16.8	84
Magnesium	1000	1000	985	1000	100	934	940	94
Manganese	0	20.0	0.16	20.4	102	0.20	20.1	100
Molybdenum	20.0	20.0	19.0	19.8	99	19.2	19.0	95
Nickel	0	20.0	0.054	21.0	105	0.050	20.7	104
Potassium	1000	1000	992	1010	101	984	985	98
Selenium	0	10.0	0.16	9.62	96	0.35	9.30	93
Silicon	0	1000	-220	794	79	-410	455	46
Silver	0	5.00	0.0090	4.99	100	0.010	4.85	97
Sodium	2500	2500	2550	2610	104	2450	2470	99
Strontium	0	10.0	0.017	10.2	102	0.020	10.7	107
Thallium	0	0	-0.0020	-0.0030		0.012	0.0	
Tin	0	10.0	-0.010	9.98	100	-0.0060	10.3	103
Titanium	20.0	20.0	19.6	20.2	101	18.6	20.8	104
Vanadium	0	20.0	-0.015	20.3	102	-0.022	20.2	101
Zinc	0	20.0	0.066	15.9	80	0.22	16.0	80
Zirconium	0	20.0	0.0050	18.0	90	0.0080	16.4	82

ICP INTERFERENCE CHECK SAMPLE

Lab Name: GCAL Contract: SDG No.: 214102205

Lab Code LA024 Case No.: SAS No.: Analysis Batch 544453

ICP ID Number: ICPMS2 ICS Source: 243-93-10 Agilent~243-93-11 HIGH PURITY

Concentration Units: mg/L

Analyte	True		Initial Found			Final Found		
	Sol. A	Sol. AB	Sol. A	Sol. AB	%R	Sol. A	Sol. AB	%R
Aluminum	1000	1000	1030	1030	103	1030	1040	104
Antimony	0	0	0.031	0.027		0.020	0.019	
Arsenic	0	10.0	0.024	10.1	101	0.015	10.0	100
Barium	0	0	0.17	0.19		0.18	0.20	
Beryllium	0	0	0.0080	0.010		0.012	0.012	
Boron	0	20.0	0.62	20.6	103	0.78	22.0	110
Cadmium	0	10.0	0.043	10.0	100	0.036	9.94	99
Calcium	3000	3000	3040	3100	103	3070	3130	104
Chromium	0	20.0	0.053	20.7	104	-0.048	19.7	98
Cobalt	0	20.0	0.048	21.2	106	0.047	20.5	102
Copper	0	20.0	0.0010	21.0	105	0.014	20.2	101
Iron	2500	2500	2540	2580	103	2480	2500	100
Lead	0	0	0.0080	0.0060		0.023	0.021	
Lithium	0	20.0	0.10	21.5	108	0.79	24.0	120
Magnesium	1000	1000	1040	1040	104	1030	1020	102
Manganese	0	20.0	0.17	19.9	100	0.18	19.4	97
Molybdenum	20.0	20.0	19.6	19.5	98	19.2	19.1	96
Nickel	0	20.0	0.047	21.4	107	0.035	20.3	102
Potassium	1000	1000	987	1000	100	998	1000	100
Selenium	0	10.0	0.10	9.41	94	0.17	9.65	96
Silicon	0	1000	-300	673	67	-2300	-1300	-127
Silver	0	5.00	0.011	4.89	98	0.010	4.77	95
Sodium	2500	2500	2650	2680	107	2660	2690	108
Strontium	0	10.0	0.020	10.4	104	0.027	10.4	104
Thallium	0	0	0.0050	0.0080		0.0060	0.0070	
Tin	0	10.0	-0.0040	10.0	100	0.0030	10.1	101
Titanium	20.0	20.0	19.9	20.6	103	19.6	20.1	100
Vanadium	0	20.0	-0.020	20.2	101	-0.029	19.6	98
Zinc	0	20.0	-1.0	17.3	86	-1.0	16.8	84
Zirconium	0	20.0	0.0070	19.7	98	0.0050	19.3	96

ICP INTERFERENCE CHECK SAMPLE

Lab Name: GCAL Contract: SDG No.: 214102205

Lab Code LA024 Case No.: SAS No.: Analysis Batch: 544547

ICP ID Number: ICPMS2 ICS Source: 243-93-10 Agilent~243-93-11 HIGH PURITY

Concentration Units: mg/L

Analyte	True		Initial Found			Final Found		
	Sol. A	Sol. AB	Sol. A	Sol. AB	%R	Sol. A	Sol. AB	%R
Aluminum	1000	1000	1010	1020	102			
Antimony	0	0	0.039	0.088				
Arsenic	0	10.0	0.017	10.1	101			
Barium	0	0	0.17	0.21				
Beryllium	0	0	0.014	0.042				
Boron	0	20.0	0.55	20.2	101			
Cadmium	0	10.0	0.037	10.2	102			
Calcium	3000	3000	2970	3070	102			
Chromium	0	20.0	0.077	20.1	100			
Cobalt	0	20.0	0.044	20.9	104			
Copper	0	20.0	0.023	21.0	105			
Iron	2500	2500	2520	2530	101			
Lead	0	0	0.016	0.034				
Lithium	0	20.0	0.084	20.7	104			
Magnesium	1000	1000	1010	1010	101			
Manganese	0	20.0	0.046	19.4	97			
Molybdenum	20.0	20.0	19.5	19.4	97			
Nickel	0	20.0	0.055	20.9	104			
Potassium	1000	1000	991	992	99			
Selenium	0	10.0	0.18	9.75	98			
Silicon	0	1000	-79	959	96			
Silver	0	5.00	0.012	4.99	100			
Sodium	2500	2500	2560	2590	104			
Strontium	0	10.0	0.0070	10.1	101			
Thallium	0	0	0.0060	0.031				
Tin	0	10.0	-0.068	9.83	98			
Titanium	20.0	20.0	19.4	20.2	101			
Vanadium	0	20.0	-0.012	19.8	99			
Zinc	0	20.0	-0.40	16.8	84			
Zirconium	0	20.0	0.0010	19.3	96			

ICP INTERFERENCE CHECK SAMPLE

Lab Name: GCAL Contract: SDG No.: 214102205

Lab Code LA024 Case No.: SAS No.: Analysis Batch: 543609

ICP ID Number: ICPMS2 ICS Source: 243-86-4 Agilent~243-87-10 HIGH PURITY

Concentration Units: mg/L

Analyte	True		Initial Found			Final Found		
	Sol. A	Sol. AB	Sol. A	Sol. AB	%R	Sol. A	Sol. AB	%R
Aluminum	1000	1000	1010	984	98			
Antimony	0	0	0.11	0.061				
Arsenic	0	10.0	0.048	9.60	96			
Barium	0	0	0.24	0.19				
Beryllium	0	0	0.036	0.0090				
Boron	0	20.0	1.29	19.2	96			
Cadmium	0	10.0	0.050	9.59	96			
Calcium	3000	3000	3060	3020	101			
Chromium	0	20.0	0.058	19.6	98			
Cobalt	0	20.0	0.077	19.7	98			
Copper	0	20.0	0.075	20.2	101			
Iron	2500	2500	2520	2460	98			
Lead	0	0	0.034	-0.0040				
Lithium	0	20.0	0.70	20.4	102			
Magnesium	1000	1000	994	967	97			
Manganese	0	20.0	0.60	19.2	96			
Molybdenum	20.0	20.0	20.5	19.5	98			
Nickel	0	20.0	0.11	20.2	101			
Potassium	1000	1000	1030	998	100			
Selenium	0	10.0	0.14	11.9	119			
Silicon	0	1000	5.21	1100	110			
Silver	0	5.00	0.0050	4.62	92			
Sodium	2500	2500	2550	2520	101			
Strontium	0	10.0	0.069	10.4	104			
Thallium	0	0	0.023	-0.0010				
Tin	0	10.0	0.094	9.82	98			
Titanium	20.0	20.0	19.0	19.3	96			
Vanadium	0	20.0	0.040	19.2	96			
Zinc	0	10.0	2.31	10.2	102			
Zirconium	0	20.0	0.053	22.7	114			

ICP INTERFERENCE CHECK SAMPLE

Lab Name: GCAL Contract: SDG No.: 214102205

Lab Code LA024 Case No.: SAS No.: Analysis Batch: 544364

ICP ID Number: ICPMS2 ICS Source: 243-93-10 Agilent~243-93-11 HIGH PURITY

Concentration Units: mg/L

Analyte	True		Initial Found			Final Found		
	Sol. A	Sol. AB	Sol. A	Sol. AB	%R	Sol. A	Sol. AB	%R
Aluminum	1000	1000	1040	1040	104			
Antimony	0	0	0.051	0.037				
Arsenic	0	10.0	0.030	10.3	103			
Barium	0	0	0.17	0.20				
Beryllium	0	0	0.013	0.013				
Boron	0	20.0	1.95	21.6	108			
Cadmium	0	10.0	0.040	10.2	102			
Calcium	3000	3000	3080	3140	105			
Chromium	0	20.0	0.011	20.5	102			
Cobalt	0	20.0	0.050	21.1	106			
Copper	0	20.0	0.031	21.2	106			
Iron	2500	2500	2610	2590	104			
Lead	0	0	0.024	0.010				
Lithium	0	20.0	0.17	20.9	104			
Magnesium	1000	1000	1030	1030	103			
Manganese	0	20.0	0.26	20.0	100			
Molybdenum	20.0	20.0	19.8	20.0	100			
Nickel	0	20.0	0.027	21.0	105			
Potassium	1000	1000	1010	1010	101			
Selenium	0	10.0	0.14	10.0	100			
Silicon	0	1000	-31	1010	101			
Silver	0	5.00	0.010	4.99	100			
Sodium	2500	2500	2630	2660	106			
Strontium	0	10.0	0.024	10.5	105			
Thallium	0	0	0.0090	0.0090				
Tin	0	10.0	0.0030	10.2	102			
Titanium	20.0	20.0	20.1	20.8	104			
Vanadium	0	20.0	0.022	20.1	100			
Zinc	0	20.0	0.44	18.6	93			
Zirconium	0	20.0	0.0090	20.2	101			

MS/MSD RECOVERY

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix Spike - EPA Sample No: MWQ-24 Method SW-846 6020A/7470A

SAMPLE NO. : 21410220516

COMPOUND	*UNITS*	*SPIKE ADDED*	*SAMPLE CONCENTRATION*	*MS CONCENTRATION*	*MS % REC*	*#*	*QC. LIMITS*
Aluminum	ug/L	1000	10.3	929	92		80 - 120
Antimony	ug/L	100	0	102	102		80 - 120
Arsenic	ug/L	50	4.77	55	100		80 - 120
Barium	ug/L	50	54.8	102	95		80 - 120
Beryllium	ug/L	50	0	45.8	92		80 - 120
Cadmium	ug/L	50	0	47.4	95		80 - 120
Calcium	ug/L	25000	43600	65900	89		80 - 120
Chromium	ug/L	50	.57	50.5	100		80 - 120
Cobalt	ug/L	50	0	50.3	101		80 - 120
Copper	ug/L	50	0	50.2	100		80 - 120
Iron	ug/L	5000	0	5000	100		80 - 120
Lead	ug/L	50	0	49.9	100		80 - 120
Magnesium	ug/L	5000	21000	25100	82		80 - 120
Manganese	ug/L	50	0	51.9	104		80 - 120
Mercury	ug/L	5	0	4.69	94		80 - 120
Molybdenum	ug/L	50	9.5	59	99		80 - 120
Nickel	ug/L	100	0	99.9	100		80 - 120
Potassium	ug/L	5000	3930	8750	96		80 - 120
Selenium	ug/L	10	.58	10.2	97		80 - 120
Silver	ug/L	50	0	52.7	105		80 - 120
Sodium	ug/L	5000	33000	36700	74	N	80 - 120
Thallium	ug/L	50	0	48.1	96		80 - 120
Titanium	ug/L	50	0	48.6	97		80 - 120
Vanadium	ug/L	50	33.4	82.8	99		80 - 120
Zinc	ug/L	1000	0	977	98		80 - 120

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD : 0 out of 25 outside limits

Spike Recovery: 1 out of 50 outside limits

MS/MSD RECOVERY

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix Spike - EPA Sample No: MWQ-24 Method SW-846 6020A/7470A

SAMPLE NO. : 21410220517

COMPOUND	*UNITS*	*SPIKE ADDED*	*MSD CONC.*	*MSD % REC*	#	*% RPD*	#	*QC. LIMITS REC*	*RPD*
Aluminum	ug/L	1000	904	89		3		80 - 120	0 - 20
Antimony	ug/L	100	101	101		2		80 - 120	0 - 20
Arsenic	ug/L	50	53.9	98		2		80 - 120	0 - 20
Barium	ug/L	50	103	97		1		80 - 120	0 - 20
Beryllium	ug/L	50	44.7	89		2		80 - 120	0 - 20
Cadmium	ug/L	50	47.2	94		1		80 - 120	0 - 20
Calcium	ug/L	25000	67000	93		2		80 - 120	0 - 20
Chromium	ug/L	50	49.5	98		2		80 - 120	0 - 20
Cobalt	ug/L	50	49.1	98		2		80 - 120	0 - 20
Copper	ug/L	50	49.1	98		2		80 - 120	0 - 20
Iron	ug/L	5000	4870	97		3		80 - 120	0 - 20
Lead	ug/L	50	49.2	98		1		80 - 120	0 - 20
Magnesium	ug/L	5000	26000	99		3		80 - 120	0 - 20
Manganese	ug/L	50	50.7	101		2		80 - 120	0 - 20
Mercury	ug/L	5	4.34	87		8		80 - 120	0 - 20
Molybdenum	ug/L	50	58.3	98		1		80 - 120	0 - 20
Nickel	ug/L	100	97.9	98		2		80 - 120	0 - 20
Potassium	ug/L	5000	8820	98		1		80 - 120	0 - 20
Selenium	ug/L	10	10.4	99		2		80 - 120	0 - 20
Silver	ug/L	50	52.1	104		1		80 - 120	0 - 20
Sodium	ug/L	5000	38400	108		4		80 - 120	0 - 20
Thallium	ug/L	50	47.4	95		2		80 - 120	0 - 20
Titanium	ug/L	50	48.7	97		0		80 - 120	0 - 20
Vanadium	ug/L	50	83.1	99		0		80 - 120	0 - 20
Zinc	ug/L	1000	957	96		2		80 - 120	0 - 20

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD : 0 out of 25 outside limits

Spike Recovery: 1 out of 50 outside limits

MS/MSD RECOVERY

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix Spike - EPA Sample No: MA01MW002 Method SW-846 6020A Dissolved

SAMPLE NO. : 1372698

COMPOUND	*UNITS*	*SPIKE ADDED*	*SAMPLE CONCENTRATION*	*MS CONCENTRATION*	*MS % REC*	#	*QC. LIMITS*
Aluminum	ug/L	1000	0	916	92		80 - 120
Antimony	ug/L	100	0	103	103		80 - 120
Arsenic	ug/L	50	0	49.7	99		80 - 120
Barium	ug/L	50	14.1	62.1	96		80 - 120
Beryllium	ug/L	50	0	44.3	89		80 - 120
Cadmium	ug/L	50	0	46.6	93		80 - 120
Calcium	ug/L	25000	44400	65300	84		80 - 120
Chromium	ug/L	50	1.45	48	93		80 - 120
Cobalt	ug/L	50	0	47.7	95		80 - 120
Copper	ug/L	50	0	47.4	95		80 - 120
Iron	ug/L	5000	0	4720	94		80 - 120
Lead	ug/L	50	0	47.1	94		80 - 120
Magnesium	ug/L	5000	36800	39300	50	N	80 - 120
Manganese	ug/L	50	0	49.8	100		80 - 120
Molybdenum	ug/L	50	6.67	52.4	91		80 - 120
Nickel	ug/L	100	0	95.3	95		80 - 120
Potassium	ug/L	5000	6020	10200	84		80 - 120
Selenium	ug/L	10	4.61	13.8	92		80 - 120
Silver	ug/L	50	0	48.2	96		80 - 120
Sodium	ug/L	5000	490000	486000	-79	N	80 - 120
Thallium	ug/L	50	0	35.9	72	N	80 - 120
Titanium	ug/L	50	0	49.8	100		80 - 120
Vanadium	ug/L	50	11.5	57.8	93		80 - 120
Zinc	ug/L	1000	0	975	98		80 - 120

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD : 0 out of 24 outside limits

Spike Recovery: 6 out of 48 outside limits

MS/MSD RECOVERY

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix Spike - EPA Sample No: MA01MW002 Method SW-846 6020A Dissolved

SAMPLE NO. : 1372699

COMPOUND	*UNITS*	*SPIKE ADDED*	*MSD CONC.*	*MSD % REC*	#	*% RPD*	#	*QC. LIMITS REC*	*RPD*
Aluminum	ug/L	1000	951	95		4		80 - 120	0 - 20
Antimony	ug/L	100	104	104		1		80 - 120	0 - 20
Arsenic	ug/L	50	51.2	102		3		80 - 120	0 - 20
Barium	ug/L	50	62.8	98		1		80 - 120	0 - 20
Beryllium	ug/L	50	48	96		8		80 - 120	0 - 20
Cadmium	ug/L	50	47.9	96		3		80 - 120	0 - 20
Calcium	ug/L	25000	65900	86		1		80 - 120	0 - 20
Chromium	ug/L	50	49.6	96		3		80 - 120	0 - 20
Cobalt	ug/L	50	48.9	98		2		80 - 120	0 - 20
Copper	ug/L	50	49.6	99		4		80 - 120	0 - 20
Iron	ug/L	5000	4860	97		3		80 - 120	0 - 20
Lead	ug/L	50	48.9	98		4		80 - 120	0 - 20
Magnesium	ug/L	5000	40400	73	N	3		80 - 120	0 - 20
Manganese	ug/L	50	51.4	103		3		80 - 120	0 - 20
Molybdenum	ug/L	50	54.1	95		3		80 - 120	0 - 20
Nickel	ug/L	100	98.4	98		3		80 - 120	0 - 20
Potassium	ug/L	5000	10500	90		3		80 - 120	0 - 20
Selenium	ug/L	10	15	104		9		80 - 120	0 - 20
Silver	ug/L	50	50.4	101		4		80 - 120	0 - 20
Sodium	ug/L	5000	489000	-21	N	1		80 - 120	0 - 20
Thallium	ug/L	50	36.3	73	N	1		80 - 120	0 - 20
Titanium	ug/L	50	46.8	94		6		80 - 120	0 - 20
Vanadium	ug/L	50	59.8	97		3		80 - 120	0 - 20
Zinc	ug/L	1000	1000	100		3		80 - 120	0 - 20

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD : 0 out of 24 outside limits

Spike Recovery: 6 out of 48 outside limits

MS/MSD RECOVERY

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix Spike - EPA Sample No: M114MW002 Method SW-846 6020A Dissolved

SAMPLE NO. : 1373164

COMPOUND	*UNITS*	*SPIKE ADDED*	*SAMPLE CONCENTRATION*	*MS CONCENTRATION*	*MS % REC*	#	*QC. LIMITS*
Aluminum	ug/L	1000	0	980	98		80 - 120
Antimony	ug/L	100	0	104	104		80 - 120
Arsenic	ug/L	50	0	50.1	100		80 - 120
Barium	ug/L	50	14.3	62	96		80 - 120
Beryllium	ug/L	50	0	49.8	100		80 - 120
Cadmium	ug/L	50	0	49.7	99		80 - 120
Calcium	ug/L	25000	340000	352000	48	N	80 - 120
Chromium	ug/L	50	0	51.1	102		80 - 120
Cobalt	ug/L	50	0	50.5	101		80 - 120
Copper	ug/L	50	0	52.8	106		80 - 120
Iron	ug/L	5000	0	4990	100		80 - 120
Lead	ug/L	50	0	49.1	98		80 - 120
Magnesium	ug/L	5000	313000	313000	-2	N	80 - 120
Manganese	ug/L	50	0	47.7	95		80 - 120
Molybdenum	ug/L	50	15.7	64.9	98		80 - 120
Nickel	ug/L	100	0	101	101		80 - 120
Potassium	ug/L	5000	14400	18500	81		80 - 120
Selenium	ug/L	10	15	22.9	79	N	80 - 120
Silver	ug/L	50	0	47.7	95		80 - 120
Sodium	ug/L	5000	2470000	2420000	-910	N	80 - 120
Thallium	ug/L	50	0	46.8	94		80 - 120
Titanium	ug/L	50	0	49.7	99		80 - 120
Vanadium	ug/L	50	7.92	56.8	98		80 - 120
Zinc	ug/L	1000	0	1040	104		80 - 120

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD : 0 out of 24 outside limits

Spike Recovery: 6 out of 48 outside limits

MS/MSD RECOVERY

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix Spike - EPA Sample No: M114MW002 Method SW-846 6020A Dissolved

SAMPLE NO. : 1373165

COMPOUND	*UNITS*	*SPIKE ADDED*	*MSD CONC.*	*MSD % REC*	#	*% RPD*	#	*QC. LIMITS REC*	*RPD*
Aluminum	ug/L	1000	1040	104		6		80 - 120	0 - 20
Antimony	ug/L	100	106	106		2		80 - 120	0 - 20
Arsenic	ug/L	50	53.3	107		6		80 - 120	0 - 20
Barium	ug/L	50	63.7	99		3		80 - 120	0 - 20
Beryllium	ug/L	50	51.6	103		4		80 - 120	0 - 20
Cadmium	ug/L	50	49.6	99		0		80 - 120	0 - 20
Calcium	ug/L	25000	360000	82		2		80 - 120	0 - 20
Chromium	ug/L	50	53.4	107		4		80 - 120	0 - 20
Cobalt	ug/L	50	53.5	107		6		80 - 120	0 - 20
Copper	ug/L	50	59.1	118		11		80 - 120	0 - 20
Iron	ug/L	5000	5220	104		5		80 - 120	0 - 20
Lead	ug/L	50	51	102		4		80 - 120	0 - 20
Magnesium	ug/L	5000	313000	17	N	0		80 - 120	0 - 20
Manganese	ug/L	50	50.9	102		6		80 - 120	0 - 20
Molybdenum	ug/L	50	66	101		2		80 - 120	0 - 20
Nickel	ug/L	100	109	109		7		80 - 120	0 - 20
Potassium	ug/L	5000	19000	92		3		80 - 120	0 - 20
Selenium	ug/L	10	25.5	105		11		80 - 120	0 - 20
Silver	ug/L	50	48.4	97		2		80 - 120	0 - 20
Sodium	ug/L	5000	2420000	-879	N	0		80 - 120	0 - 20
Thallium	ug/L	50	48.7	97		4		80 - 120	0 - 20
Titanium	ug/L	50	53.2	106		7		80 - 120	0 - 20
Vanadium	ug/L	50	60.1	104		6		80 - 120	0 - 20
Zinc	ug/L	1000	1110	111		7		80 - 120	0 - 20

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD : 0 out of 24 outside limits

Spike Recovery: 6 out of 48 outside limits

MS/MSD RECOVERY

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix Spike - EPA Sample No: MWQ-24 Method SW-846 6020A/7470A Dissolved

SAMPLE NO. : 21410220516

COMPOUND	*UNITS*	*SPIKE ADDED*	*SAMPLE CONCENTRATION*	*MS CONCENTRATION*	*MS % REC*	*#*	*QC. LIMITS*
Aluminum	ug/L	1000	12.7	1040	103		80 - 120
Antimony	ug/L	100	0	112	112		80 - 120
Arsenic	ug/L	50	4.92	57.7	105		80 - 120
Barium	ug/L	50	60.7	116	110		80 - 120
Beryllium	ug/L	50	0	48.6	97		80 - 120
Cadmium	ug/L	50	0	55	110		80 - 120
Calcium	ug/L	25000	47800	72400	98		80 - 120
Chromium	ug/L	50	.58	51.4	102		80 - 120
Cobalt	ug/L	50	0	50.1	100		80 - 120
Copper	ug/L	50	0	48.9	98		80 - 120
Iron	ug/L	5000	0	5090	102		80 - 120
Lead	ug/L	50	0	52.1	104		80 - 120
Magnesium	ug/L	5000	23600	28000	88		80 - 120
Manganese	ug/L	50	0	49.9	100		80 - 120
Mercury	ug/L	5	0	4.36	87		80 - 120
Molybdenum	ug/L	50	9.93	64.1	108		80 - 120
Nickel	ug/L	100	0	98.5	98		80 - 120
Potassium	ug/L	5000	4420	9700	106		80 - 120
Selenium	ug/L	10	.65	11.4	107		80 - 120
Silver	ug/L	50	0	44.9	90		80 - 120
Sodium	ug/L	5000	37000	41100	83		80 - 120
Thallium	ug/L	50	0	46.5	93		80 - 120
Titanium	ug/L	50	0	51	102		80 - 120
Vanadium	ug/L	50	34.6	85.8	102		80 - 120
Zinc	ug/L	1000	0	1020	102		80 - 120

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD : 0 out of 25 outside limits

Spike Recovery: 2 out of 50 outside limits

FORM V (PART 1) - IN

MS/MSD RECOVERY

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix Spike - EPA Sample No: MWQ-24 Method SW-846 6020A/7470A Dissolved

SAMPLE NO. : 21410220517

COMPOUND	*UNITS*	*SPIKE ADDED*	*MSD CONC.*	*MSD % REC*	#	*% RPD*	#	*QC. LIMITS REC*	*RPD*
Aluminum	ug/L	1000	989	98		5		80 - 120	0 - 20
Antimony	ug/L	100	105	105		7		80 - 120	0 - 20
Arsenic	ug/L	50	55.2	100		4		80 - 120	0 - 20
Barium	ug/L	50	113	104		2		80 - 120	0 - 20
Beryllium	ug/L	50	44.8	90		8		80 - 120	0 - 20
Cadmium	ug/L	50	51.5	103		7		80 - 120	0 - 20
Calcium	ug/L	25000	71400	94		1		80 - 120	0 - 20
Chromium	ug/L	50	48.7	96		5		80 - 120	0 - 20
Cobalt	ug/L	50	47.2	94		6		80 - 120	0 - 20
Copper	ug/L	50	46.2	92		6		80 - 120	0 - 20
Iron	ug/L	5000	4780	96		6		80 - 120	0 - 20
Lead	ug/L	50	48.6	97		7		80 - 120	0 - 20
Magnesium	ug/L	5000	27500	78	N	2		80 - 120	0 - 20
Manganese	ug/L	50	47.3	95		5		80 - 120	0 - 20
Mercury	ug/L	5	4.78	96		9		80 - 120	0 - 20
Molybdenum	ug/L	50	60.5	101		6		80 - 120	0 - 20
Nickel	ug/L	100	93.5	93		5		80 - 120	0 - 20
Potassium	ug/L	5000	9420	100		3		80 - 120	0 - 20
Selenium	ug/L	10	10.7	101		6		80 - 120	0 - 20
Silver	ug/L	50	43.4	87		3		80 - 120	0 - 20
Sodium	ug/L	5000	40200	64	N	2		80 - 120	0 - 20
Thallium	ug/L	50	43.2	86		7		80 - 120	0 - 20
Titanium	ug/L	50	49.5	99		3		80 - 120	0 - 20
Vanadium	ug/L	50	83.7	98		3		80 - 120	0 - 20
Zinc	ug/L	1000	963	96		5		80 - 120	0 - 20

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD : 0 out of 25 outside limits

Spike Recovery: 2 out of 50 outside limits

FORM V (PART 1) - IN

MS/MSD RECOVERY

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Matrix Spike - EPA Sample No: MA01MW004-a Method SW-846 7470A Dissolved

SAMPLE NO. : 1373156

COMPOUND	*UNITS*	*SPIKE ADDED*	*SAMPLE CONCENTRATION*	*MS CONCENTRATION*	*MS % REC*	#	*QC. LIMITS*
Mercury	ug/L	5	0	3.79	76	N	80 - 120

SAMPLE NO. : 1373157

COMPOUND	*UNITS*	*SPIKE ADDED*	*MSD CONC.*	*MSD % REC*	#	*% RPD*	#	*QC. LIMITS REC*	*RPD*
Mercury	ug/L	5	3.59	72	N	6		80 - 120	0 - 30

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD : 0 out of 1 outside limits

Spike Recovery: 2 out of 2 outside limits

POST DIGEST SPIKE SAMPLE RECOVERY

Lab Name: GCAL
Sample ID: MWQ-24PDS

Lab Code: LA024 Case No.:
Contract:

Matrix: (soil / water) Water
SAS No.: SDG No.: 214102205

Level: (low / med)
Lab Sample ID: 1375759

Orig Lab Sample ID 21410220515

Analyte	LL	UL	Spiked Sample Result	C	Sample Result	C	Spike Added	% R	Q	Units	Method	Type
Aluminum	75	125	932		10.3	J	1000	92		ug/L	SW-846 6020A	MS
Antimony	75	125	101		0	U	100	101		ug/L	SW-846 6020A	MS
Arsenic	75	125	56		4.77		50	102		ug/L	SW-846 6020A	MS
Barium	75	125	103		54.8		50	97		ug/L	SW-846 6020A	MS
Beryllium	75	125	45.4		0	U	50	91		ug/L	SW-846 6020A	MS
Cadmium	75	125	48.3		0	U	50	97		ug/L	SW-846 6020A	MS
Calcium	75	125	66300		43600		25000	91		ug/L	SW-846 6020A	MS
Chromium	75	125	51.3		.57	J	50	101		ug/L	SW-846 6020A	MS
Cobalt	75	125	51		0	U	50	102		ug/L	SW-846 6020A	MS
Copper	75	125	51.1		0	U	50	102		ug/L	SW-846 6020A	MS
Iron	75	125	5070		0	U	5000	101		ug/L	SW-846 6020A	MS
Lead	75	125	49.3		0	U	50	99		ug/L	SW-846 6020A	MS
Manganese	75	125	53		0	U	50	106		ug/L	SW-846 6020A	MS
Molybdenum	75	125	59.7		9.5		50	100		ug/L	SW-846 6020A	MS
Nickel	75	125	103		0	U	100	103		ug/L	SW-846 6020A	MS
Potassium	75	125	8730		3930		5000	96		ug/L	SW-846 6020A	MS
Selenium	75	125	9.55		.58	J	10	90		ug/L	SW-846 6020A	MS
Silver	75	125	49.9		0	U	50	100		ug/L	SW-846 6020A	MS
Thallium	75	125	49.3		0	U	50	99		ug/L	SW-846 6020A	MS
Titanium			48.5		0	U	50	97		ug/L	SW-846 6020A	MS
Vanadium	75	125	83.7		33.4		50	101		ug/L	SW-846 6020A	MS
Zinc	75	125	999		0	U	1000	100		ug/L	SW-846 6020A	MS

POST DIGEST SPIKE SAMPLE RECOVERY

Lab Name: GCAL
Sample ID: MWQ-24PDS

Lab Code: LA024
Case No.:
Contract:

Matrix: (soil / water) Water
SAS No.:
SDG No.: 214102205

Level: (low / med)
Lab Sample ID: 1375850

Orig Lab Sample ID 21410220515

Analyte	LL	UL	Spiked Sample Result	C	Sample Result	C	Spike Added	% R	Q	Units	Method	Type
Magnesium	75	125	68500		21000		50000	95		ug/L	SW-846 6020A	MS
Sodium	75	125	79500		33000		50000	93		ug/L	SW-846 6020A	MS

LABORATORY CONTROL SAMPLE

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: (soil / water) Water

Lab Sample ID: 1372875

Sample ID: LCS1372875

Contract:

SAS No.: SDG No.: 214102205

LCS Source: 2121887 Inroganic Ventures

Analyte	True	Found	% R	LL	UL	Units	Method	Type
Aluminum	1000	1070	107	80	120	ug/L	SW-846 6020A	MS
Antimony	100	109	109	80	120	ug/L	SW-846 6020A	MS
Arsenic	50.0	52.9	106	80	120	ug/L	SW-846 6020A	MS
Barium	50.0	53.5	107	80	120	ug/L	SW-846 6020A	MS
Beryllium	50.0	54.6	109	80	120	ug/L	SW-846 6020A	MS
Cadmium	50.0	52.6	105	80	120	ug/L	SW-846 6020A	MS
Calcium	25000	26600	106	80	120	ug/L	SW-846 6020A	MS
Chromium	50.0	53.9	108	80	120	ug/L	SW-846 6020A	MS
Cobalt	50.0	54.4	109	80	120	ug/L	SW-846 6020A	MS
Copper	50.0	54.7	109	80	120	ug/L	SW-846 6020A	MS
Iron	5000	5360	107	80	120	ug/L	SW-846 6020A	MS
Lead	50.0	52.5	105	80	120	ug/L	SW-846 6020A	MS
Magnesium	5000	5540	111	80	120	ug/L	SW-846 6020A	MS
Manganese	50.0	50.4	101	80	120	ug/L	SW-846 6020A	MS
Molybdenum	50.0	52.8	106	80	120	ug/L	SW-846 6020A	MS
Nickel	100	109	109	80	120	ug/L	SW-846 6020A	MS
Potassium	5000	5400	108	80	120	ug/L	SW-846 6020A	MS
Selenium	10.0	10.2	102	80	120	ug/L	SW-846 6020A	MS
Silver	50.0	51.6	103	80	120	ug/L	SW-846 6020A	MS
Sodium	5000	5410	108	80	120	ug/L	SW-846 6020A	MS
Thallium	50.0	52.9	106	80	120	ug/L	SW-846 6020A	MS
Titanium	50.0	52.8	106	80	120	ug/L	SW-846 6020A	MS
Vanadium	50.0	53.7	107	80	120	ug/L	SW-846 6020A	MS
Zinc	1000	1060	106	80	120	ug/L	SW-846 6020A	MS

FORM VII - IN

LABORATORY CONTROL SAMPLE

Lab Name: GCAL
Sample ID: LCS1373151

Lab Code: LA024
Case No.:
Contract:

Matrix: (soil / water) Water
SAS No.:
SDG No.: 214102205

Lab Sample ID: 1373151
LCS Source: 2121887 Inroganic Ventures

Analyte	True	Found	% R	LL	UL	Units	Method	Type
Aluminum	1000	951	95	80	120	ug/L	SW-846 6020A	MS
Antimony	100	103	103	80	120	ug/L	SW-846 6020A	MS
Arsenic	50.0	51.5	103	80	120	ug/L	SW-846 6020A	MS
Barium	50.0	51.8	104	80	120	ug/L	SW-846 6020A	MS
Beryllium	50.0	44.0	88	80	120	ug/L	SW-846 6020A	MS
Cadmium	50.0	48.9	98	80	120	ug/L	SW-846 6020A	MS
Calcium	25000	25100	101	80	120	ug/L	SW-846 6020A	MS
Chromium	50.0	50.7	101	80	120	ug/L	SW-846 6020A	MS
Cobalt	50.0	50.9	102	80	120	ug/L	SW-846 6020A	MS
Copper	50.0	49.9	100	80	120	ug/L	SW-846 6020A	MS
Iron	5000	5040	101	80	120	ug/L	SW-846 6020A	MS
Lead	50.0	49.3	99	80	120	ug/L	SW-846 6020A	MS
Magnesium	5000	4800	96	80	120	ug/L	SW-846 6020A	MS
Manganese	50.0	50.2	100	80	120	ug/L	SW-846 6020A	MS
Molybdenum	50.0	49.5	99	80	120	ug/L	SW-846 6020A	MS
Nickel	100	101	101	80	120	ug/L	SW-846 6020A	MS
Potassium	5000	4930	99	80	120	ug/L	SW-846 6020A	MS
Selenium	10.0	9.85	99	80	120	ug/L	SW-846 6020A	MS
Silver	50.0	49.0	98	80	120	ug/L	SW-846 6020A	MS
Sodium	5000	4770	95	80	120	ug/L	SW-846 6020A	MS
Thallium	50.0	45.1	90	80	120	ug/L	SW-846 6020A	MS
Titanium	50.0	46.5	93	80	120	ug/L	SW-846 6020A	MS
Vanadium	50.0	51.7	103	80	120	ug/L	SW-846 6020A	MS
Zinc	1000	1000	100	80	120	ug/L	SW-846 6020A	MS

FORM VII - IN

LABORATORY CONTROL SAMPLE

Lab Name: GCAL
Sample ID: LCS1373520

Lab Code: LA024 Case No.:
Contract:

Matrix: (soil / water) Water
SAS No.: SDG No.: 214102205

Lab Sample ID: 1373520
LCS Source: 2121887 Inroganic Ventures

Analyte	True	Found	% R	LL	UL	Units	Method	Type
Aluminum	1000	912	91	80	120	ug/L	SW-846 6020A	MS
Antimony	100	97.0	97	80	120	ug/L	SW-846 6020A	MS
Arsenic	50.0	46.1	92	80	120	ug/L	SW-846 6020A	MS
Barium	50.0	46.3	93	80	120	ug/L	SW-846 6020A	MS
Beryllium	50.0	44.3	89	80	120	ug/L	SW-846 6020A	MS
Cadmium	50.0	45.5	91	80	120	ug/L	SW-846 6020A	MS
Calcium	25000	23300	93	80	120	ug/L	SW-846 6020A	MS
Chromium	50.0	46.6	93	80	120	ug/L	SW-846 6020A	MS
Cobalt	50.0	46.9	94	80	120	ug/L	SW-846 6020A	MS
Copper	50.0	46.5	93	80	120	ug/L	SW-846 6020A	MS
Iron	5000	4620	92	80	120	ug/L	SW-846 6020A	MS
Lead	50.0	45.4	91	80	120	ug/L	SW-846 6020A	MS
Magnesium	5000	4630	93	80	120	ug/L	SW-846 6020A	MS
Manganese	50.0	47.6	95	80	120	ug/L	SW-846 6020A	MS
Molybdenum	50.0	46.3	93	80	120	ug/L	SW-846 6020A	MS
Nickel	100	92.8	93	80	120	ug/L	SW-846 6020A	MS
Potassium	5000	4610	92	80	120	ug/L	SW-846 6020A	MS
Selenium	10.0	9.18	92	80	120	ug/L	SW-846 6020A	MS
Silver	50.0	49.1	98	80	120	ug/L	SW-846 6020A	MS
Sodium	5000	4560	91	80	120	ug/L	SW-846 6020A	MS
Thallium	50.0	46.0	92	80	120	ug/L	SW-846 6020A	MS
Titanium	50.0	44.8	90	80	120	ug/L	SW-846 6020A	MS
Vanadium	50.0	47.2	94	80	120	ug/L	SW-846 6020A	MS
Zinc	1000	914	91	80	120	ug/L	SW-846 6020A	MS

FORM VII - IN

LABORATORY CONTROL SAMPLE

Lab Name: GCAL
Sample ID: LCS1372697

Lab Code: LA024
Case No.:
Contract:

Matrix: (soil / water) Water
SAS No.:
SDG No.: 214102205

Lab Sample ID: 1372697
LCS Source: 2121887 Inroganic Ventures

Analyte	True	Found	% R	LL	UL	Units	Method	Type
Aluminum (Dissolved)	1000	940	94	80	120	ug/L	SW-846 6020A Dissolved	MS
Antimony (Dissolved)	100	101	101	80	120	ug/L	SW-846 6020A Dissolved	MS
Arsenic (Dissolved)	50.0	46.3	93	80	120	ug/L	SW-846 6020A Dissolved	MS
Barium (Dissolved)	50.0	50.8	102	80	120	ug/L	SW-846 6020A Dissolved	MS
Beryllium (Dissolved)	50.0	50.7	101	80	120	ug/L	SW-846 6020A Dissolved	MS
Cadmium (Dissolved)	50.0	51.0	102	80	120	ug/L	SW-846 6020A Dissolved	MS
Calcium (Dissolved)	25000	23400	93	80	120	ug/L	SW-846 6020A Dissolved	MS
Chromium (Dissolved)	50.0	46.1	92	80	120	ug/L	SW-846 6020A Dissolved	MS
Cobalt (Dissolved)	50.0	45.7	91	80	120	ug/L	SW-846 6020A Dissolved	MS
Copper (Dissolved)	50.0	46.2	92	80	120	ug/L	SW-846 6020A Dissolved	MS
Iron (Dissolved)	5000	4610	92	80	120	ug/L	SW-846 6020A Dissolved	MS
Lead (Dissolved)	50.0	50.6	101	80	120	ug/L	SW-846 6020A Dissolved	MS
Magnesium (Dissolved)	5000	4700	94	80	120	ug/L	SW-846 6020A Dissolved	MS
Manganese (Dissolved)	50.0	45.1	90	80	120	ug/L	SW-846 6020A Dissolved	MS
Molybdenum (Dissolved)	50.0	49.4	99	80	120	ug/L	SW-846 6020A Dissolved	MS
Nickel (Dissolved)	100	92.1	92	80	120	ug/L	SW-846 6020A Dissolved	MS
Potassium (Dissolved)	5000	4740	95	80	120	ug/L	SW-846 6020A Dissolved	MS
Selenium (Dissolved)	10.0	9.89	99	80	120	ug/L	SW-846 6020A Dissolved	MS
Silver (Dissolved)	50.0	52.4	105	80	120	ug/L	SW-846 6020A Dissolved	MS
Sodium (Dissolved)	5000	4550	91	80	120	ug/L	SW-846 6020A Dissolved	MS
Thallium (Dissolved)	50.0	50.2	100	80	120	ug/L	SW-846 6020A Dissolved	MS
Titanium (Dissolved)	50.0	46.2	92	80	120	ug/L	SW-846 6020A Dissolved	MS
Vanadium (Dissolved)	50.0	45.7	91	80	120	ug/L	SW-846 6020A Dissolved	MS
Zinc (Dissolved)	1000	894	89	80	120	ug/L	SW-846 6020A Dissolved	MS

LABORATORY CONTROL SAMPLE

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: (soil / water) Water

Lab Sample ID: 1373163

Sample ID: LCS1373163

Contract:

SAS No.: SDG No.: 214102205

LCS Source: 2121887 Inroganic Ventures

Analyte	True	Found	% R	LL	UL	Units	Method	Type
Aluminum (Dissolved)	1000	1030	103	80	120	ug/L	SW-846 6020A Dissolved	MS
Antimony (Dissolved)	100	102	102	80	120	ug/L	SW-846 6020A Dissolved	MS
Arsenic (Dissolved)	50.0	50.5	101	80	120	ug/L	SW-846 6020A Dissolved	MS
Barium (Dissolved)	50.0	49.5	99	80	120	ug/L	SW-846 6020A Dissolved	MS
Beryllium (Dissolved)	50.0	49.5	99	80	120	ug/L	SW-846 6020A Dissolved	MS
Cadmium (Dissolved)	50.0	49.6	99	80	120	ug/L	SW-846 6020A Dissolved	MS
Calcium (Dissolved)	25000	25600	102	80	120	ug/L	SW-846 6020A Dissolved	MS
Chromium (Dissolved)	50.0	50.9	102	80	120	ug/L	SW-846 6020A Dissolved	MS
Cobalt (Dissolved)	50.0	51.0	102	80	120	ug/L	SW-846 6020A Dissolved	MS
Copper (Dissolved)	50.0	50.9	102	80	120	ug/L	SW-846 6020A Dissolved	MS
Iron (Dissolved)	5000	5100	102	80	120	ug/L	SW-846 6020A Dissolved	MS
Lead (Dissolved)	50.0	48.8	98	80	120	ug/L	SW-846 6020A Dissolved	MS
Magnesium (Dissolved)	5000	5250	105	80	120	ug/L	SW-846 6020A Dissolved	MS
Manganese (Dissolved)	50.0	48.8	98	80	120	ug/L	SW-846 6020A Dissolved	MS
Molybdenum (Dissolved)	50.0	50.0	100	80	120	ug/L	SW-846 6020A Dissolved	MS
Nickel (Dissolved)	100	101	101	80	120	ug/L	SW-846 6020A Dissolved	MS
Potassium (Dissolved)	5000	5220	104	80	120	ug/L	SW-846 6020A Dissolved	MS
Selenium (Dissolved)	10.0	10.1	101	80	120	ug/L	SW-846 6020A Dissolved	MS
Silver (Dissolved)	50.0	49.2	98	80	120	ug/L	SW-846 6020A Dissolved	MS
Sodium (Dissolved)	5000	5050	101	80	120	ug/L	SW-846 6020A Dissolved	MS
Thallium (Dissolved)	50.0	50.4	101	80	120	ug/L	SW-846 6020A Dissolved	MS
Titanium (Dissolved)	50.0	50.9	102	80	120	ug/L	SW-846 6020A Dissolved	MS
Vanadium (Dissolved)	50.0	50.7	101	80	120	ug/L	SW-846 6020A Dissolved	MS
Zinc (Dissolved)	1000	1050	105	80	120	ug/L	SW-846 6020A Dissolved	MS

LABORATORY CONTROL SAMPLE

Lab Name: GCAL
Sample ID: LCS1373486

Lab Code: LA024 Case No.:
Contract:

Matrix: (soil / water) Water
SAS No.: SDG No.: 214102205

Lab Sample ID: 1373486
LCS Source: 2121887 Inroganic Ventures

Analyte	True	Found	% R	LL	UL	Units	Method	Type
Aluminum (Dissolved)	1000	1060	106	80	120	ug/L	SW-846 6020A Dissolved	MS
Antimony (Dissolved)	100	107	107	80	120	ug/L	SW-846 6020A Dissolved	MS
Arsenic (Dissolved)	50.0	51.8	104	80	120	ug/L	SW-846 6020A Dissolved	MS
Barium (Dissolved)	50.0	52.1	104	80	120	ug/L	SW-846 6020A Dissolved	MS
Beryllium (Dissolved)	50.0	54.0	108	80	120	ug/L	SW-846 6020A Dissolved	MS
Cadmium (Dissolved)	50.0	51.6	103	80	120	ug/L	SW-846 6020A Dissolved	MS
Calcium (Dissolved)	25000	26200	105	80	120	ug/L	SW-846 6020A Dissolved	MS
Chromium (Dissolved)	50.0	51.4	103	80	120	ug/L	SW-846 6020A Dissolved	MS
Cobalt (Dissolved)	50.0	51.5	103	80	120	ug/L	SW-846 6020A Dissolved	MS
Copper (Dissolved)	50.0	51.7	103	80	120	ug/L	SW-846 6020A Dissolved	MS
Iron (Dissolved)	5000	5160	103	80	120	ug/L	SW-846 6020A Dissolved	MS
Lead (Dissolved)	50.0	50.2	100	80	120	ug/L	SW-846 6020A Dissolved	MS
Magnesium (Dissolved)	5000	5300	106	80	120	ug/L	SW-846 6020A Dissolved	MS
Manganese (Dissolved)	50.0	49.3	99	80	120	ug/L	SW-846 6020A Dissolved	MS
Molybdenum (Dissolved)	50.0	51.2	102	80	120	ug/L	SW-846 6020A Dissolved	MS
Nickel (Dissolved)	100	103	103	80	120	ug/L	SW-846 6020A Dissolved	MS
Potassium (Dissolved)	5000	5310	106	80	120	ug/L	SW-846 6020A Dissolved	MS
Selenium (Dissolved)	10.0	10.4	104	80	120	ug/L	SW-846 6020A Dissolved	MS
Silver (Dissolved)	50.0	50.8	102	80	120	ug/L	SW-846 6020A Dissolved	MS
Sodium (Dissolved)	5000	5170	103	80	120	ug/L	SW-846 6020A Dissolved	MS
Thallium (Dissolved)	50.0	50.4	101	80	120	ug/L	SW-846 6020A Dissolved	MS
Titanium (Dissolved)	50.0	51.2	102	80	120	ug/L	SW-846 6020A Dissolved	MS
Vanadium (Dissolved)	50.0	51.5	103	80	120	ug/L	SW-846 6020A Dissolved	MS
Zinc (Dissolved)	1000	1060	106	80	120	ug/L	SW-846 6020A Dissolved	MS

LABORATORY CONTROL SAMPLE

Lab Name: GCAL
Sample ID: LCS1372877

Lab Code: LA024
Case No.:
Contract:

Matrix: (soil / water) Water
SAS No.:
SDG No.: 214102205

Lab Sample ID: 1372877
LCS Source: 243-83-10 EXAXOL

Analyte	True	Found	% R	LL	UL	Units	Method	Type
Mercury	5.00	4.25	85	80	120	ug/L	SW-846 7470A	AV

FORM VII - IN

LABORATORY CONTROL SAMPLE

Lab Name: GCAL
Sample ID: LCS1373155

Lab Code: LA024
Case No.:
Contract:

Matrix: (soil / water) Water
SAS No.:
SDG No.: 214102205

Lab Sample ID: 1373155
LCS Source: 243-83-10 EXAXOL

Analyte	True	Found	% R	LL	UL	Units	Method	Type
Mercury (Dissolved)	5.00	4.06	81	80	120	ug/L	SW-846 7470A Dissolved	AV

FORM VII - IN

LABORATORY CONTROL SAMPLE

Lab Name: GCAL
Sample ID: LCS1373159

Lab Code: LA024
Case No.:
Contract:

Matrix: (soil / water) Water
SAS No.:
SDG No.: 214102205

Lab Sample ID: 1373159
LCS Source: 243-83-10 EXAXOL

Analyte	True	Found	% R	LL	UL	Units	Method	Type
Mercury	5.00	4.06	81	80	120	ug/L	SW-846 7470A	AV

FORM VII - IN

LABORATORY CONTROL SAMPLE

Lab Name: GCAL
Sample ID: LCS1373490

Lab Code: LA024
Case No.:
Contract:

Matrix: (soil / water) Water
SAS No.:
SDG No.: 214102205

Lab Sample ID: 1373490
LCS Source: 243-83-10 EXAXOL

Analyte	True	Found	% R	LL	UL	Units	Method	Type
Mercury	5.00	5.61	112	80	120	ug/L	SW-846 7470A	AV

FORM VII - IN

SERIAL DILUTIONS

Lab Name: GCAL
Sample ID MWQ-24SD
Lab Code: LA024 Case No.
Contract:
Matrix: (soil / water) Water
SAS No.: SDG No.: 214102205
Level: (low / med)
Org Lab Sample ID: 21410220515
Lab Sample ID: 1375760

Analyte	LL	UL	Initial Sample Result	C	Serial Dilution Result	C	% Diff.	Q	Units	Method	Type
Aluminum			10.3	J	27.9	J	171		ug/L	SW-846 6020A	MS
Antimony			0	U	0	U			ug/L	SW-846 6020A	MS
Arsenic			4.77		5.04		5.7		ug/L	SW-846 6020A	MS
Barium	0	10	54.8		52.7		3.8		ug/L	SW-846 6020A	MS
Beryllium			0	U	0	U			ug/L	SW-846 6020A	MS
Cadmium			0	U	0	U			ug/L	SW-846 6020A	MS
Calcium	0	10	43600		44500		2.1		ug/L	SW-846 6020A	MS
Chromium			0.57	J	0	U	100		ug/L	SW-846 6020A	MS
Cobalt			0	U	0	U			ug/L	SW-846 6020A	MS
Copper			0	U	0	U			ug/L	SW-846 6020A	MS
Iron			0	U	0	U			ug/L	SW-846 6020A	MS
Lead			0	U	0	U			ug/L	SW-846 6020A	MS
Manganese			0	U	0	U			ug/L	SW-846 6020A	MS
Molybdenum			9.50		9.32		1.9		ug/L	SW-846 6020A	MS
Nickel			0	U	0	U			ug/L	SW-846 6020A	MS
Potassium	0	10	3930		3940		.3		ug/L	SW-846 6020A	MS
Selenium			0.58	J	0	U	100		ug/L	SW-846 6020A	MS
Silver			0	U	0	U			ug/L	SW-846 6020A	MS
Thallium			0	U	0	U			ug/L	SW-846 6020A	MS
Titanium			0	U	0	U			ug/L	SW-846 6020A	MS
Vanadium	0	10	33.4		33.4		0		ug/L	SW-846 6020A	MS
Zinc			0	U	0	U			ug/L	SW-846 6020A	MS

SERIAL DILUTIONS

Lab Name: GCAL
Lab Code: LA024 Case No.
Matrix: (soil / water) Water
Level: (low / med)
Lab Sample ID: 1375851

Sample ID MWQ-24SD
Contract:
SAS No.: SDG No.: 214102205
Org Lab Sample ID: 21410220515

Analyte	LL	UL	Initial Sample Result	C	Serial Dilution Result	C	% Diff.	Q	Units	Method	Type
Magnesium	0	10	21000		20900		.5		ug/L	SW-846 6020A	MS
Sodium	0	10	33000		33300		.9		ug/L	SW-846 6020A	MS

SERIAL DILUTIONS

-

Lab Name: GCAL
Sample ID MA01MW002SD

Lab Code: LA024 Case No.
Contract:

Matrix: (soil / water) Water
SAS No.: SDG No.: 214102205

Level: (low / med)
Org Lab Sample ID: 21410220501

Lab Sample ID: 1375756

Analyte	LL	UL	Initial Sample Result	C	Serial Dilution Result	C	% Diff.	Q	Units	Method	Type
Aluminum (Dissolved)			0	U	0	U			ug/L	-846 6020A Dissolv	MS
Antimony (Dissolved)			0	U	0	U			ug/L	-846 6020A Dissolv	MS
Arsenic (Dissolved)			0	U	0	U			ug/L	-846 6020A Dissolv	MS
Barium (Dissolved)			14.1		14.0	J	.7		ug/L	-846 6020A Dissolv	MS
Beryllium (Dissolved)			0	U	0	U			ug/L	-846 6020A Dissolv	MS
Cadmium (Dissolved)			0	U	0	U			ug/L	-846 6020A Dissolv	MS
Calcium (Dissolved)	0	10	44400		45200		1.8		ug/L	-846 6020A Dissolv	MS
Chromium (Dissolved)			1.45	J	0	U	100		ug/L	-846 6020A Dissolv	MS
Cobalt (Dissolved)			0	U	0	U			ug/L	-846 6020A Dissolv	MS
Copper (Dissolved)			0	U	0	U			ug/L	-846 6020A Dissolv	MS
Iron (Dissolved)			0	U	0	U			ug/L	-846 6020A Dissolv	MS
Lead (Dissolved)			0	U	0	U			ug/L	-846 6020A Dissolv	MS
Magnesium (Dissolved)	0	10	36800		36500		.8		ug/L	-846 6020A Dissolv	MS
Manganese (Dissolved)			0	U	0	U			ug/L	-846 6020A Dissolv	MS
Molybdenum (Dissolved			6.67		7.17	J	7.5		ug/L	-846 6020A Dissolv	MS
Nickel (Dissolved)			0	U	0	U			ug/L	-846 6020A Dissolv	MS
Potassium (Dissolved)			6020		6020		0		ug/L	-846 6020A Dissolv	MS
Selenium (Dissolved)			4.61	J	7.91	J	71.6		ug/L	-846 6020A Dissolv	MS
Silver (Dissolved)			0	U	0	U			ug/L	-846 6020A Dissolv	MS
Thallium (Dissolved)			0	U	0	U			ug/L	-846 6020A Dissolv	MS
Titanium (Dissolved)			0	U	0	U			ug/L	-846 6020A Dissolv	MS
Vanadium (Dissolved)			11.5		10.8	J	6.1		ug/L	-846 6020A Dissolv	MS
Zinc (Dissolved)			0	U	0	U			ug/L	-846 6020A Dissolv	MS

SERIAL DILUTIONS

Lab Name: GCAL

Lab Code: LA024 Case No.

Matrix: (soil / water) Water

Level: (low / med)

Lab Sample ID: 1375832

Sample ID MA01MW002SD

Contract:

SAS No.: SDG No.: 214102205

Org Lab Sample ID: 21410220501

Analyte	LL	UL	Initial Sample Result	C	Serial Dilution Result	C	% Diff.	Q	Units	Method	Type
Sodium (Dissolved)	0	10	490000		531000		8.4		ug/L	-846 6020A Dissolv	MS

FORM IX - IN

SERIAL DILUTIONS

Lab Name: GCAL
Sample ID MWQ-24SD

Lab Code: LA024 Case No.
Contract:

Matrix: (soil / water) Water
SAS No.: SDG No.: 214102205

Level: (low / med)
Org Lab Sample ID: 21410220515

Lab Sample ID: 1377507

Analyte	LL	UL	Initial Sample Result	C	Serial Dilution Result	C	% Diff.	Q	Units	Method	Type
Aluminum (Dissolved)			12.7	J	0	U	100		ug/L	-846 6020A Dissol	MS
Antimony (Dissolved)			0	U	0	U			ug/L	-846 6020A Dissol	MS
Arsenic (Dissolved)			4.92		5.17		5.1		ug/L	-846 6020A Dissol	MS
Barium (Dissolved)	0	10	60.7		56.7		6.6		ug/L	-846 6020A Dissol	MS
Beryllium (Dissolved)			0	U	0	U			ug/L	-846 6020A Dissol	MS
Cadmium (Dissolved)			0	U	0	U			ug/L	-846 6020A Dissol	MS
Calcium (Dissolved)	0	10	47800		48400		1.3		ug/L	-846 6020A Dissol	MS
Chromium (Dissolved)			0.58	J	0	U	100		ug/L	-846 6020A Dissol	MS
Cobalt (Dissolved)			0	U	0	U			ug/L	-846 6020A Dissol	MS
Copper (Dissolved)			0	U	0	U			ug/L	-846 6020A Dissol	MS
Iron (Dissolved)			0	U	0	U			ug/L	-846 6020A Dissol	MS
Lead (Dissolved)			0	U	0	U			ug/L	-846 6020A Dissol	MS
Manganese (Dissolved)			0	U	8.75	J			ug/L	-846 6020A Dissol	MS
Molybdenum (Dissolved			9.93		9.64		2.9		ug/L	-846 6020A Dissol	MS
Nickel (Dissolved)			0	U	0	U			ug/L	-846 6020A Dissol	MS
Potassium (Dissolved)	0	10	4420		4320		2.3		ug/L	-846 6020A Dissol	MS
Selenium (Dissolved)			0.65	J	0	U	100		ug/L	-846 6020A Dissol	MS
Silver (Dissolved)			0	U	0	U			ug/L	-846 6020A Dissol	MS
Thallium (Dissolved)			0	U	0	U			ug/L	-846 6020A Dissol	MS
Titanium (Dissolved)			0	U	0	U			ug/L	-846 6020A Dissol	MS
Vanadium (Dissolved)	0	10	34.6		35.4		2.3		ug/L	-846 6020A Dissol	MS
Zinc (Dissolved)			0	U	31.8	J			ug/L	-846 6020A Dissol	MS

SERIAL DILUTIONS

Lab Name: GCAL

Lab Code: LA024 Case No.

Matrix: (soil / water) Water

Level: (low / med)

Lab Sample ID: 1377508

Sample ID MWQ-24SD

Contract:

SAS No.: SDG No.: 214102205

Org Lab Sample ID: 21410220515

Analyte	LL	UL	Initial Sample Result	C	Serial Dilution Result	C	% Diff.	Q	Units	Method	Type
Magnesium (Dissolved)	0	10	23600		22800		3.4		ug/L	/-846 6020A Dissol	MS
Sodium (Dissolved)	0	10	37000		36900		.3		ug/L	/-846 6020A Dissol	MS

FORM IX - IN

SERIAL DILUTIONS

Lab Name: GCAL
Sample ID M114MW002SD

Lab Code: LA024 Case No.
Contract:

Matrix: (soil / water) Water
SAS No.: SDG No.: 214102205

Level: (low / med)
Org Lab Sample ID: 21410220509

Lab Sample ID: 1378029

Analyte	LL	UL	Initial Sample Result	C	Serial Dilution Result	C	% Diff.	Q	Units	Method	Type
Aluminum (Dissolved)			0	U	0	U			ug/L	/-846 6020A Dissolv	MS
Antimony (Dissolved)			0	U	0	U			ug/L	/-846 6020A Dissolv	MS
Arsenic (Dissolved)			0	U	0	U			ug/L	/-846 6020A Dissolv	MS
Barium (Dissolved)			14.3	J	0	U	100		ug/L	/-846 6020A Dissolv	MS
Beryllium (Dissolved)			0	U	0	U			ug/L	/-846 6020A Dissolv	MS
Cadmium (Dissolved)			0	U	0	U			ug/L	/-846 6020A Dissolv	MS
Calcium (Dissolved)	0	10	340000		360000		5.9		ug/L	/-846 6020A Dissolv	MS
Chromium (Dissolved)			0	U	0	U			ug/L	/-846 6020A Dissolv	MS
Cobalt (Dissolved)			0	U	0	U			ug/L	/-846 6020A Dissolv	MS
Copper (Dissolved)			0	U	0	U			ug/L	/-846 6020A Dissolv	MS
Iron (Dissolved)			0	U	0	U			ug/L	/-846 6020A Dissolv	MS
Lead (Dissolved)			0	U	0	U			ug/L	/-846 6020A Dissolv	MS
Manganese (Dissolved)			0	U	0	U			ug/L	/-846 6020A Dissolv	MS
Molybdenum (Dissolved			15.7	J	0	U	100		ug/L	/-846 6020A Dissolv	MS
Nickel (Dissolved)			0	U	0	U			ug/L	/-846 6020A Dissolv	MS
Potassium (Dissolved)			14400		15100		4.9		ug/L	/-846 6020A Dissolv	MS
Selenium (Dissolved)			15.0	J	0	U	100		ug/L	/-846 6020A Dissolv	MS
Silver (Dissolved)			0	U	0	U			ug/L	/-846 6020A Dissolv	MS
Thallium (Dissolved)			0	U	0	U			ug/L	/-846 6020A Dissolv	MS
Titanium (Dissolved)			0	U	0	U			ug/L	/-846 6020A Dissolv	MS
Vanadium (Dissolved)			7.92	J	0	U	100		ug/L	/-846 6020A Dissolv	MS
Zinc (Dissolved)			0	U	0	U			ug/L	/-846 6020A Dissolv	MS

FORM IX - IN

SERIAL DILUTIONS

Lab Name: GCAL
Lab Code: LA024 Case No.
Matrix: (soil / water) Water
Level: (low / med)
Lab Sample ID: 1378047

Sample ID M114MW002SD
Contract:
SAS No.: SDG No.: 214102205
Org Lab Sample ID: 21410220509

Analyte	LL	UL	Initial Sample Result	C	Serial Dilution Result	C	% Diff.	Q	Units	Method	Type
Magnesium (Dissolved)			313000		330000		5.4		ug/L	-846 6020A Dissol	MS
Sodium (Dissolved)	0	10	2470000		2630000		6.5		ug/L	-846 6020A Dissol	MS

FORM IX - IN

METHOD DETECTION LIMITS

Lab Name: GCAL

Lab Code: LA024

SDG No.: 214102205

Instrument ID: (MS) ICPMS1/ICPMS2 (AV) FIMS1

Analyte	*MDL*	*Units*	*Type*
Aluminum	5	ug/L	MS
Antimony	.5	ug/L	MS
Arsenic	.25	ug/L	MS
Barium	.25	ug/L	MS
Beryllium	.25	ug/L	MS
Cadmium	.25	ug/L	MS
Calcium	125	ug/L	MS
Chromium	.25	ug/L	MS
Cobalt	.25	ug/L	MS
Copper	.25	ug/L	MS
Iron	25	ug/L	MS
Lead	.25	ug/L	MS
Magnesium	25	ug/L	MS
Manganese	1.25	ug/L	MS
Molybdenum	.25	ug/L	MS
Nickel	.5	ug/L	MS
Potassium	25	ug/L	MS
Selenium	.25	ug/L	MS
Silver	.25	ug/L	MS
Sodium	25	ug/L	MS
Thallium	.25	ug/L	MS
Titanium	.25	ug/L	MS
Vanadium	.25	ug/L	MS
Zinc	5	ug/L	MS
Mercury	0.00007	mg/L	AV

PREPARATION LOG

Lab Name: GCAL Sample ID:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Method: SW-846 6020A Method Type MS Prep Batch: 543566

EPA Sample No.	Preparation Date	Weight	Units	Volume	Units
LCS1372875	10/23/14			50	mL
MA01MW001	10/23/14			50	mL
MA01MW002	10/23/14			50	mL
MA01MW003	10/23/14			50	mL
MA01MW004	10/23/14			50	mL
MA01MW004-a	10/23/14			50	mL
MB1372874	10/23/14			50	mL

PREPARATION LOG

Lab Name: GCAL Sample ID:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Method: SW-846 6020A Method Type MS Prep Batch: 543616

EPA Sample No.	Preparation Date	Weight	Units	Volume	Units
LCS1373151	10/23/14			50	mL
M114MW001	10/23/14			50	mL
M114MW002	10/23/14			50	mL
M114MW003	10/23/14			50	mL
M114MW004	10/23/14			50	mL
MB1373150	10/23/14			50	mL

PREPARATION LOG

Lab Name: GCAL Sample ID:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Method: SW-846 6020A Method Type MS Prep Batch: 543697

EPA Sample No.	Preparation Date	Weight	Units	Volume	Units
LCS1373520	10/26/14			50	mL
MA02MW001D	10/26/14			50	mL
MB1373519	10/26/14			50	mL
MWQ-24	10/26/14			50	mL
MWQ-24-ms	10/26/14			50	mL
MWQ-24-sd	10/26/14			50	mL

FORM XIII - IN

PREPARATION LOG

Lab Name: GCAL Sample ID:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Method: SW-846 6020A Dissolved Method Type MS Prep Batch: 543538

EPA Sample No.	Preparation Date	Weight	Units	Volume	Units
LCS1372697	10/22/14			50	mL
MA01MW001	10/22/14			50	mL
MA01MW002	10/22/14			50	mL
MA01MW002MS	10/22/14			50	mL
MA01MW002MSD	10/22/14			50	mL
MA01MW003	10/22/14			50	mL
MA01MW004	10/22/14			50	mL
MA01MW004-a	10/22/14			50	mL
MB1372696	10/22/14			50	mL

PREPARATION LOG

Lab Name: GCAL Sample ID:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Method: SW-846 6020A Dissolved Method Type MS Prep Batch: 543620

EPA Sample No.	Preparation Date	Weight	Units	Volume	Units
LCS1373163	10/24/14			50	mL
M114MW001	10/24/14			50	mL
M114MW002	10/24/14			50	mL
M114MW002MS	10/24/14			50	mL
M114MW002MSD	10/24/14			50	mL
M114MW003	10/24/14			50	mL
M114MW004	10/24/14			50	mL
MB1373162	10/24/14			50	mL

PREPARATION LOG

Lab Name: GCAL Sample ID:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Method: SW-846 6020A Dissolved Method Type MS Prep Batch: 543681

EPA Sample No.	Preparation Date	Weight	Units	Volume	Units
LCS1373486	10/24/14			50	mL
MA02MW001D	10/24/14			50	mL
MB1373485	10/24/14			50	mL
MWQ-24	10/24/14			50	mL
MWQ-24-ms	10/24/14			50	mL
MWQ-24-sd	10/24/14			50	mL

PREPARATION LOG

Lab Name: GCAL Sample ID:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Method: SW-846 7470A Method Type AV Prep Batch: 543567

EPA Sample No.	Preparation Date	Weight	Units	Volume	Units
LCS1372877	10/23/14			20	mL
MA01MW001	10/23/14			20	mL
MA01MW002	10/23/14			20	mL
MA01MW003	10/23/14			20	mL
MA01MW004	10/23/14			20	mL
MA01MW004-a	10/23/14			20	mL
MB1372876	10/23/14			20	mL

PREPARATION LOG

Lab Name: GCAL Sample ID:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Method: SW-846 7470A Dissolved Method Type AV Prep Batch: 543617

EPA Sample No.	Preparation Date	Weight	Units	Volume	Units
1-RT0225028 (TCLP)MS	10/23/14			20	mL
LCS1373155	10/23/14			20	mL
M114MW001	10/23/14			20	mL
M114MW002	10/23/14			20	mL
M114MW003	10/23/14			20	mL
M114MW004	10/23/14			20	mL
MA01MW001	10/23/14			20	mL
MA01MW002	10/23/14			20	mL
MA01MW003	10/23/14			20	mL
MA01MW004	10/23/14			20	mL
MA01MW004-a	10/23/14			20	mL
MA01MW004-aMS	10/23/14			20	mL
MA01MW004-aMSD	10/23/14			20	mL
MB1373154	10/23/14			20	mL

PREPARATION LOG

Lab Name: GCAL Sample ID:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Method: SW-846 7470A Method Type AV Prep Batch: 543618

EPA Sample No.	Preparation Date	Weight	Units	Volume	Units
LCS1373159	10/23/14			20	mL
M114MW001	10/23/14			20	mL
M114MW002	10/23/14			20	mL
M114MW003	10/23/14			20	mL
M114MW004	10/23/14			20	mL
MB1373158	10/23/14			20	mL

PREPARATION LOG

Lab Name: GCAL Sample ID:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Method: SW-846 7470A Method Type AV Prep Batch: 543682

EPA Sample No.	Preparation Date	Weight	Units	Volume	Units
LCS1373490	10/24/14			20	mL
MA02MW001D	10/24/14			20	mL
MB1373489	10/24/14			20	mL
MWQ-24	10/24/14			20	mL
MWQ-24-ms	10/24/14			20	mL
MWQ-24-sd	10/24/14			50	mL

FORM XIII - IN

PREPARATION LOG

Lab Name: GCAL Sample ID:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205

Method: SW-846 7470A Dissolved Method Type AV Prep Batch: 543682

EPA Sample No.	Preparation Date	Weight	Units	Volume	Units
LCS1373490	10/24/14			20	mL
MA02MW001D	10/24/14			20	mL
MB1373489	10/24/14			20	mL
MWQ-24	10/24/14			20	mL
MWQ-24-ms	10/24/14			20	mL
MWQ-24-sd	10/24/14			20	mL

FORM XIII - IN

ANALYSIS RUN LOG

Lab Name: GCAL | Contract: | Start Date: 10/29/14

Lab Code: LA024 | Case No.: | SAS No.: | SDG No.: 214102205 | End Date: 10/30/14

Instrument ID Number: ICPMS1 | Method: SW-846 6020A | Method Type: MS | Analysis Batch: 543993

Sample No.	PF	D/F	Time	Analyte Symbols: Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo	Ni	K	Se	Si	Ag	Na	Sr	Tl	Sn	Ti	V	Zn	Zr
ITUNE	*	1	1330																															
IICALB	*	1	1345	X	X	X	X			X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
IICAL2	*	1	1352	X	X	X	X			X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
IICAL3	*	1	1400	X	X	X	X			X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
IICAL4	*	1	1409	X	X	X	X			X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
IICAL5	*	1	1417	X	X	X	X			X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
ICV	*	1	1425	X	X	X	X			X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
ICB	*	1	1433	X	X	X	X			X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
LLCCV	*	1	1440	X	X	X	X			X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
ICSA	*	1	1449	X	X	X	X			X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
ICSAB	*	1	1503	X	X	X	X			X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
ICSA	*	1	2344	X	X	X	X			X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
ICSAB	*	1	2352	X	X	X	X			X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
CCB	*	1	0249	X	X	X	X			X	X	X	X	X	X	X		X	X		X	X	X	X		X			X		X	X	X	
LLCCV	*	1	0257	X	X	X	X			X	X	X	X	X	X	X		X	X		X	X	X	X		X			X		X	X	X	
CCV	*	1	0304	X	X	X	X			X	X	X	X	X	X	X		X	X		X	X	X	X		X			X		X	X	X	
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		100	0312																															
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		100	0319																															
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	0327																															
MB1373519 T	*	1	0334	X	X	X	X			X	X	X	X	X	X	X		X	X		X	X	X	X		X			X			X	X	
LCS1373520 T	*	1	0341	X	X	X	X			X	X	X	X	X	X	X		X	X		X	X	X	X		X			X			X	X	
CCB	*	1	0426	X	X	X	X			X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
LLCCV	*	1	0433	X	X	X	X			X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
CCV	*	1	0440	X	X	X	X			X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
MA02MW001DDL T	*	500	0525																								X							
MA02MW001D T	*	20	0532	X	X	X	X			X	X	X	X	X	X	X		X	X		X	X	X	X		X			X		X	X	X	
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	0540																															

214102205 464

ANALYSIS RUN LOG

Lab Name: GCAL Contract: Start Date: 10/29/14

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205 End Date: 10/30/14

Instrument ID Number: ICPMS1 Method: SW-846 6020A Method Type: MS Analysis Batch: 543993

Sample No.	PF	D/F	Time	Analyte Symbols																														
				Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo	Ni	K	Se	Si	Ag	Na	Sr	Tl	Sn	Ti	V	Zn	Zr
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	0554																															
CCB	*	1	0602	X	X	X	X			X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
LLCCV	*	1	0609	X	X	X	X			X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
CCV	*	1	0617	X	X	X	X			X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	

214102205 465

ANALYSIS RUN LOG

Lab Name: GCAL | Contract: | Start Date: 10/30/14

Lab Code: LA024 | Case No.: | SAS No.: | SDG No.: 214102205 | End Date: 10/31/14

Instrument ID Number: ICPMS1 | Method: SW-846 6020A | Method Type: MS | Analysis Batch: 544053

Analyte Symbols

Sample No.	PF	D/F	Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo	Ni	K	Se	Si	Ag	Na	Sr	Tl	Sn	Ti	V	Zn	Zr
ITUNE	*	1	1205												X						X													
IICALB	*	1	1220	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
IICAL2	*	1	1228	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
IICAL3	*	1	1235	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
IICAL4	*	1	1245	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
IICAL5	*	1	1252	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
ICV	*	1	1311	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
ICB	*	1	1318	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
LLCCV	*	1	1326	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
ICSA	*	1	1333	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
ICSAB	*	1	1340	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
ICSA	*	1	2152	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
ICSAB	*	1	2200	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
CCB	*	1	2251	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
LLCCV	*	1	2259	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
CCV	*	1	2306	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		10	2328																															
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		10	2336																															
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		10	2343																															
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		25	2351																															
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		25	2358																															
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		50	0005																															
MA01MW002DL D	*	100	0013																								X							
CCB	*	1	0028	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
LLCCV	*	1	0035	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
CCV	*	1	0043	X	X	X	X	X		X	X	X-	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
MA01MW002 D	*	5	0050	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X			X		X	X	X	

214102205 456

ANALYSIS RUN LOG

Lab Name: GCAL Contract: Start Date: 10/30/14

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205 End Date: 10/31/14

Instrument ID Number: ICPMS1 Method: SW-846 6020A Method Type: MS Analysis Batch: 544053

Sample No.	PF	D/F	Time	Analyte Symbols: Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo	Ni	K	Se	Si	Ag	Na	Sr	Tl	Sn	Ti	V	Zn	Zr
MA01MW002MSDL D	*	100	0057																								X							
MA01MW002MS D	*	5	0105	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X			X		X	X	X	
MA01MW002MSDDL D	*	100	0112																								X							
MA01MW002MSD D	*	5	0120	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X			X		X	X	X	
MA01MW002PDSDL D	*	100	0127	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
MA01MW002PDS	*	5	0134	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X			X		X	X	X	
MA01MW002SD DL	*	500	0142	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
MA01MW002SD D	*	25	0149	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X			X		X	X	X	
MA01MW001DL D	*	100	0156																								X							
CCB	*	1	0204	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
LLCCV	*	1	0211	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
CCV	*	1	0219	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
MA01MW001 D	*	5	0226	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X			X		X	X	X	
MA01MW004DL D	*	100	0234															X									X							
MA01MW004 D	*	2	0241	X	X	X	X	X		X	X	X	X	X	X	X			X		X	X	X	X		X			X		X	X	X	
MA01MW004-a DL D	*	100	0248															X									X							
MA01MW004-a D	*	2	0256	X	X	X	X	X		X	X	X	X	X	X	X			X		X	X	X	X		X			X		X	X	X	
MA01MW003DL D	*	100	0303															X									X							
MA01MW003 D	*	5	0311	X	X	X	X	X		X	X	X	X	X	X	X			X		X	X	X	X		X			X		X	X	X	
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		20	0318																															
CCB	*	1	0340	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
LLCCV	*	1	0348	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
CCV	*	1	0355	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
CCB	*	1	0517	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
LLCCV	*	1	0524	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
CCV	*	1	0532	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		10	0539																															

214102205 497

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: GCAL Contract: Start Date: 10/30/14

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205 End Date: 10/31/14

Instrument ID Number: ICPMS1 Method: SW-846 6020A Method Type: MS Analysis Batch: 544053

Sample No.	PF	D/F	Time	Analyte Symbols: Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo	Ni	K	Se	Si	Ag	Na	Sr	Tl	Sn	Ti	V	Zn	Zr
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		5	0547																															
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		10	0554																															
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		5	0601																															
ICSA	*	1	0609	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
ICSAB	*	1	0616	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		10	0624																															
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		5	0646																															
MB1373519 T	*	1	0653					X																			X				X			
LCS1373520 T	*	1	0701					X																			X				X			
CCB	*	1	0708	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
LLCCV	*	1	0716	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
CCV	*	1	0723	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
MWQ-24DL T	*	10	0730															X									X							
MWQ-24 T	*	1	0738	X	X	X	X	X		X	X	X	X	X	X	X			X		X	X	X	X		X			X		X	X	X	
MWQ-24-msDL T	*	10	0800															X									X							
MWQ-24-ms T	*	1	0807	X	X	X	X	X		X	X	X	X	X	X	X			X		X	X	X	X		X			X		X	X	X	
MWQ-24-sdDL T	*	10	0815															X									X							
MWQ-24-sd T	*	1	0822	X	X	X	X	X		X	X	X	X	X	X	X			X		X	X	X	X		X			X		X	X	X	
MWQ-24PDS T	*	10	0830	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
MWQ-24PDS T	*	1	0837	X	X	X	X	X		X	X	X	X	X	X	X			X		X	X	X	X		X			X		X	X	X	
MWQ-24SD T	*	50	0844	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
MWQ-24SD T	*	5	0852	X	X	X	X	X		X	X	X	X	X	X	X			X		X	X	X	X		X			X		X	X	X	
CCB	*	1	0859	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
LLCCV	*	1	0907	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
CCV	*	1	0914	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
MA02MW001DRE T	*	20	0921					X																										
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	0929																															

214102205 468

ANALYSIS RUN LOG

Lab Name: GCAL Contract: Start Date: 10/30/14

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205 End Date: 10/31/14

Instrument ID Number: ICPMS1 Method: SW-846 6020A Method Type: MS Analysis Batch: 544053

Sample No.	PF	D/F	Time	Analyte Symbols																														
				Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo	Ni	K	Se	Si	Ag	Na	Sr	Tl	Sn	Ti	V	Zn	Zr
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	0936																															
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	0944																															
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	0951																															
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	0959																															
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1006																															
CCB	*	1	1036	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
LLCCV	*	1	1043	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
CCV	*	1	1050	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	

2141022205 469

ANALYSIS RUN LOG

Lab Name: GCAL Contract: Start Date: 10/31/14

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205 End Date: 11/01/14

Instrument ID Number: ICPMS1 Method: SW-846 6020A Method Type: MS Analysis Batch: 544138

Sample No.	PF	D/F	Time	Analyte Symbols: Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo	Ni	K	Se	Si	Ag	Na	Sr	Tl	Sn	Ti	V	Zn	Zr
ITUNE	*	1	1309																															
IICALB	*	1	1531	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X		
IICAL2	*	1	1539	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X		
IICAL3	*	1	1546	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X		
IICAL4	*	1	1554	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X		
IICAL5	*	1	1601	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X		
ICV	*	1	1609	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X		
ICB	*	1	1616	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X		
LLCCV	*	1	1623	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X		
ICSA	*	1	1631	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X		
ICSAB	*	1	1638	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X		
CCB	*	1	2249	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X		
LLCCV	*	1	2257	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X		
CCV	*	1	2304	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X		
MA01MW002DL T	*	100	2349																							X								
MA01MW002 T	*	5	2356	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X			X		X	X		
MA01MW001DL T	*	100	0011																							X								
MA01MW001 T	*	5	0018	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X			X		X	X		
CCB	*	1	0026	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X		
LLCCV	*	1	0033	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X		
CCV	*	1	0041	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X		
ICSA	*	1	0048	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X		
ICSAB	*	1	0055	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X		
MA01MW004DL T	*	100	0110															X									X							
MA01MW004 T	*	2	0118	X	X	X	X	X		X	X	X	X	X	X	X			X		X	X	X	X		X			X		X	X		
MA01MW004-aDL T	*	100	0133															X									X							
MA01MW004-a T	*	2	0140	X	X	X	X	X		X	X	X	X	X	X	X			X		X	X	X	X		X			X		X	X		

214102205 470

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: GCAL Contract: Start Date: 10/31/14

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205 End Date: 11/01/14

Instrument ID Number: ICPMS1 Method: SW-846 6020A Method Type: MS Analysis Batch: 544138

Sample No.	PF	D/F	Time	Analyte Symbols																														
				Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo	Ni	K	Se	Si	Ag	Na	Sr	Tl	Sn	Ti	V	Zn	Zr
MA01MW003DL T	*	100	0155															X								X							
MA01MW003 T	*	5	0202	X	X	X	X	X		X	X	X	X	X	X	X			X		X	X	X	X		X			X		X	X		
CCB	*	1	0217	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X		
LLCCV	*	1	0225	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X		
CCV	*	1	0232	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X		

214102205 474

ANALYSIS RUN LOG

Lab Name: GCAL | Contract: | Start Date: 11/03/14

Lab Code: LA024 | Case No.: | SAS No.: | SDG No.: 214102205 | End Date: 11/03/14

Instrument ID Number: ICPMS2 | Method: SW-846 6020A | Method Type: MS | Analysis Batch: 544225

				Analyte Symbols																																		
Sample No.	PF	D/F	Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo	Ni	K	Se	Si	Ag	Na	Sr	Tl	Sn	Ti	V	Zn	Zr
ITUNE	*	1	0933	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
IICALB	*	1	1005	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
IICAL2	*	1	1008	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
IICAL4	*	1	1011	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
IICAL5	*	1	1013	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
IICAL6	*	1	1016	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
ICV	*	1	1033	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
ICB	*	1	1036	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
LLCCV	*	1	1038	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
ICSA	*	1	1041	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
ICSAB	*	1	1044	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
LCS1372875 T	*	1	1051	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
MB1372874 T	*	1	1053	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		20	1056																																	
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1101																																	
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1103																																	
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		10	1106																																	
MB1373485 D	*	1	1116	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
CCB	*	1	1118	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
LLCCV	*	1	1121	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
CCV	*	1	1123	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
LCS1373486 D	*	1	1126	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1128																																	
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		10	1131																																	
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1133																																	
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		5	1136																																	
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1138																																	

214102205 472

ANALYSIS RUN LOG

Lab Name: GCAL | Contract: | Start Date: 11/03/14

Lab Code: LA024 | Case No.: | SAS No.: | SDG No.: 214102205 | End Date: 11/03/14

Instrument ID Number: ICPMS2 | Method: SW-846 6020A | Method Type: MS | Analysis Batch: 544225

Sample No.	PF	D/F	Time	Analyte Symbols: Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo	Ni	K	Se	Si	Ag	Na	Sr	Tl	Sn	Ti	V	Zn	Zr
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1143																															
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		5	1145																															
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1148																															
CCB	*	1	1150	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
LLCCV	*	1	1153	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
CCV	*	1	1155	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	

214102205 473

ANALYSIS RUN LOG

Lab Name: GCAL | Contract: | Start Date: 11/03/14

Lab Code: LA024 | Case No.: | SAS No.: | SDG No.: 214102205 | End Date: 11/04/14

Instrument ID Number: ICPMS1 | Method: SW-846 6020A | Method Type: MS | Analysis Batch: 544258

				Analyte Symbols																																
Sample No.	PF	D/F	Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo	Ni	K	Se	Si	Ag	Na	Sr	Tl	Sn	Ti	V	Zn	Zr
ITUNE	*	1	1007	X	X	X	X	X		X	X	X	X	X	X	X			X		X	X	X	X		X			X		X	X	X	
IICALB	*	1	1022	X	X	X	X	X		X	X	X	X	X	X	X			X		X	X	X	X		X			X		X	X	X	
IICAL2	*	1	1030	X	X	X	X	X		X	X	X	X	X	X	X			X		X	X	X	X		X			X		X	X	X	
IICAL3	*	1	1037	X	X	X	X	X		X	X	X	X	X	X	X			X		X	X	X	X		X			X		X	X	X	
IICAL4	*	1	1045	X	X	X	X	X		X	X	X	X	X	X	X			X		X	X	X	X		X			X		X	X	X	
IICAL5	*	1	1052	X	X	X	X	X		X	X	X	X	X	X	X			X		X	X	X	X		X			X		X	X	X	
ICV	*	1	1059	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
ICB	*	1	1107	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
LLCCV	*	1	1121	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
ICSA	*	1	1128	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
ICSAB	*	1	1135	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
CCB	*	1	1433	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
LLCCV	*	1	1440	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
CCV	*	1	1448	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
MWQ-24DL D	*	10	1455															X									X								
MWQ-24 D	*	1	1502	X	X	X	X	X		X	X	X	X	X	X	X			X		X	X	X	X		X			X		X	X	X	
MWQ-24-msDL D	*	10	1510															X									X								
MWQ-24-ms D	*	1	1517	X	X	X	X	X		X	X	X	X	X	X	X			X		X	X	X	X		X			X		X	X	X	
MWQ-24-sdDL D	*	10	1525															X									X								
MWQ-24-sd D	*	1	1532	X	X	X	X	X		X	X	X	X	X	X	X			X		X	X	X	X		X			X		X	X	X	
MWQ-24SD	*	50	1539	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
MWQ-24SD	*	5	1547	X	X	X	X	X		X	X	X	X	X	X	X			X		X	X	X	X		X			X		X	X	X	
MA02MW001DDL D	*	500	1554																								X								
MA02MW001D D	*	20	1602	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X			X		X	X	X	
CCB	*	1	1609	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
LLCCV	*	1	1616	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
CCV	*	1	1624	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	

214102205 474

ANALYSIS RUN LOG

Lab Name: GCAL Contract: Start Date: 11/03/14

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205 End Date: 11/04/14

Instrument ID Number: ICPMS1 Method: SW-846 6020A Method Type: MS Analysis Batch: 544258

Sample No.	PF	D/F	Time	Analyte Symbols: Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo	Ni	K	Se	Si	Ag	Na	Sr	Tl	Sn	Ti	V	Zn	Zr
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1657																															
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1704																															
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1711																															
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		300	1719																															
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		300	1726																															
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		300	1733																															
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		300	1741																															
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		300	1748																															
ICSA	*	1	2009	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
ICSAB	*	1	2016	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
CCB	*	1	2138	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
LLCCV	*	1	2145	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
CCV	*	1	2153	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		20000	2200																															
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		100	2208																															
MB1373150 T	*	1	2215	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
LCS1373151 T	*	1	2222	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
M114MW002DL T	*	500	2230															X									X							
M114MW002 T	*	20	2237	X	X	X	X	X		X	X	X	X	X	X	X			X		X	X	X	X		X			X		X	X	X	
M114MW003DL T	*	500	2244															X									X							
M114MW003 T	*	20	2252	X	X	X	X	X		X	X	X	X	X	X	X			X		X	X	X	X		X			X		X	X	X	
M114MW004DL T	*	500	2259															X									X							
M114MW004 T	*	20	2307	X	X	X	X	X		X	X	X	X	X	X	X			X		X	X	X	X		X			X		X	X	X	
CCB	*	1	2314	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
LLCCV	*	1	2321	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
CCV	*	1	2329	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
M114MW001DL T	*	500	2336															X									X							

214102205 475

ANALYSIS RUN LOG

Lab Name: GCAL Contract: Start Date: 11/03/14

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205 End Date: 11/04/14

Instrument ID Number: ICPMS1 Method: SW-846 6020A Method Type: MS Analysis Batch: 544258

Sample No.	PF	D/F	Time	Analyte Symbols																																
				Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo	Ni	K	Se	Si	Ag	Na	Sr	Tl	Sn	Ti	V	Zn	Zr
M114MW001 T	*	10	2344	X	X	X	X			X	X	X	X	X	X	X			X		X	X	X	X		X					X	X	X	
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		5	2351																																
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	2358																																
CCB	*	1	0050	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
LLCCV	*	1	0057	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
CCV	*	1	0105	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	

214102205 476

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: GCAL Contract: Start Date: 11/03/14

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205 End Date: 11/03/14

Instrument ID Number: ICPMS2 Method: SW-846 6020A Method Type: MS Analysis Batch: 544453

Sample No.	PF	D/F	Time	Analyte Symbols: Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo	Ni	K	Se	Si	Ag	Na	Sr	Tl	Sn	Ti	V	Zn	Zr
ITUNE	*	1	0933																															
IICALB	*	1	1005																														X	
IICAL2	*	1	1008																														X	
IICAL4	*	1	1011																														X	
IICAL5	*	1	1013																														X	
IICAL6	*	1	1016																														X	
ICV	*	1	1033																														X	
ICB	*	1	1036																														X	
LLCCV	*	1	1038																														X	
ICSA	*	1	1041																														X	
ICSAB	*	1	1044																														X	
ICSA	*	1	1605																														X	
ICSAB	*	1	1607																														X	
CCB	*	1	2038																														X	
LLCCV	*	1	2041																														X	
CCV	*	1	2043																														X	
MA01MW002RE T	*	5	2047																														X	
MA01MW001RE T	*	5	2050																														X	
MA01MW004RE T	*	2	2052																														X	
MA01MW004-aRE T	*	2	2055																														X	
MA01MW003RE T	*	5	2057																														X	
CCB	*	1	2100																														X	
LLCCV	*	1	2102																														X	
CCV	*	1	2105																														X	

214102205 477

ANALYSIS RUN LOG

Lab Name: GCAL | Contract: | Start Date: 11/06/14

Lab Code: LA024 | Case No.: | SAS No.: | SDG No.: 214102205 | End Date: 11/06/14

Instrument ID Number: ICPMS2 | Method: SW-846 6020A | Method Type: MS | Analysis Batch: 544547

				Analyte Symbols																																
Sample No.	**PF**	**D/F**	**Time**	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo	Ni	K	Se	Si	Ag	Na	Sr	Tl	Sn	Ti	V	Zn	Zr
ITUNE	*	1	1003																																
IICALB	*	1	1051					X																					X					
IICAL2	*	1	1054					X																					X					
IICAL4	*	1	1057					X																					X					
IICAL5	*	1	1100					X																					X					
IICAL6	*	1	1103					X																					X					
ICV	*	1	1105					X																					X					
ICB	*	1	1108					X																					X					
LLCCV	*	1	1110					X																					X					
ICSA	*	1	1113					X																					X					
ICSAB	*	1	1115					X																					X					
CCB	*	1	1501					X																					X					
LLCCV	*	1	1503					X																					X					
CCV	*	1	1506					X																					X					
M114MW001RE T	*	10	1508					X																					X					
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1511																																
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1513																																
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1516																																
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1518																																
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1521																																
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1528																																
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1531																																
CCB	*	1	1533					X																					X					
LLCCV	*	1	1536					X																					X					
CCV	*	1	1538					X																					X					

214102205 479

ANALYSIS RUN LOG

Lab Name: GCAL Contract: Start Date: 10/23/14

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205 End Date: 10/24/14

Instrument ID Number: ICPMS2 Method: SW-846 6020A Method Type: MS Analysis Batch: 543609

Sample No.	PF	D/F	Time	Analyte Symbols: Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo	Ni	K	Se	Si	Ag	Na	Sr	Tl	Sn	Ti	V	Zn	Zr
ITUNE	*	1	0903																															
IICALB	*	1	0913	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
IICAL2	*	1	0918	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
IICAL4	*	1	0923	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
IICAL5	*	1	0929	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
IICAL6	*	1	0934	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
ICV	*	1	0939	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
ICB	*	1	0944	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
LLCCV	*	1	0949	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
ICSA	*	1	0955	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
ICSAB	*	1	1000	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
MB1372696 D	*	1	1011	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
LCS1372697 D	*	1	1016	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1027																															
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		10	1058																															
CCB	*	1	1103	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
LLCCV	*	1	1108	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
CCV	*	1	1114	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	

2441022205 479

ANALYSIS RUN LOG

Lab Name: GCAL Contract: Start Date: 11/04/14

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205 End Date: 11/04/14

Instrument ID Number: ICPMS2 Method: SW-846 6020A Method Type: MS Analysis Batch: 544364

Sample No.	PF	D/F	Time	Analyte Symbols: Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo	Ni	K	Se	Si	Ag	Na	Sr	Tl	Sn	Ti	V	Zn	Zr
ITUNE	*	1	1052																															
IICALB	*	1	1108	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
IICAL2	*	1	1112	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
IICAL4	*	1	1114	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
IICAL5	*	1	1117	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
IICAL6	*	1	1120	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
ICV	*	1	1122	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
ICB	*	1	1125	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
LLCCV	*	1	1127	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
ICSA	*	1	1130	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
ICSAB	*	1	1132	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
MB1373162 D	*	1	1144	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
LCS1373163 D	*	1	1147	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
M114MW002DL D	*	500	1149															X									X							
M114MW002 D	*	20	1152	X	X	X	X	X		X	X	X	X	X	X	X			X		X	X	X	X		X			X		X	X	X	
M114MW002MSDL D	*	500	1154															X									X							
M114MW002MS D	*	20	1157	X	X	X	X	X		X	X	X	X	X	X	X			X		X	X	X	X		X			X		X	X	X	
M114MW002MSDDL D	*	500	1159															X									X							
CCB	*	1	1202	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
LLCCV	*	1	1204	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
CCV	*	1	1207	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
M114MW002MSD D	*	20	1209	X	X	X	X	X		X	X	X	X	X	X	X			X		X	X	X	X		X			X		X	X	X	
M114MW002SD	*	2500	1212	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
M114MW002SD	*	100	1215	X	X	X	X	X		X	X	X	X	X	X	X			X		X	X	X	X		X			X		X	X	X	
M114MW003DL D	*	500	1217															X									X							
M114MW003 D	*	20	1220	X	X	X	X	X		X	X	X	X	X	X	X			X		X	X	X	X		X			X		X	X	X	
M114MW004DL D	*	500	1222															X									X							

214102205 489

ANALYSIS RUN LOG

Lab Name: GCAL Contract: Start Date: 11/04/14

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205 End Date: 11/04/14

Instrument ID Number: ICPMS2 Method: SW-846 6020A Method Type: MS Analysis Batch: 544364

Sample No.	PF	D/F	Time	Analyte Symbols																														
				Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo	Ni	K	Se	Si	Ag	Na	Sr	Tl	Sn	Ti	V	Zn	Zr
M114MW004 D	*	20	1225	X	X	X	X	X		X	X	X	X	X	X	X			X		X	X	X	X		X			X		X	X	X	
M114MW001DL D	*	500	1227															X									X							
M114MW001 D	*	10	1230	X	X	X	X	X		X	X	X	X	X	X	X			X		X	X	X	X		X			X		X	X	X	
CCB	*	1	1232	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
LLCCV	*	1	1235	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	
CCV	*	1	1237	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X		X		X	X	X	

214102205 491

ANALYSIS RUN LOG

Lab Name: GCAL Contract: Start Date: 10/23/14

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205 End Date: 10/24/14

Instrument ID Number: FIMS1 Method: SW-846 7470A Method Type: AV Analysis Batch: 543612

Sample No.	PF	D/F	Time	Analyte Symbols: Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Li Mg Mn Hg Mo Ni K Se Si Ag Na Sr Tl Sn Ti V Zn Zr
IICALB	*	1	1420	Hg
IICAL1	*	1	1422	Hg
IICAL2	*	1	1423	Hg
IICAL3	*	1	1425	Hg
IICAL4	*	1	1427	Hg
IICAL5	*	1	1429	Hg
ICV	*	1	1430	Hg
ICB	*	1	1432	Hg
MB1372876	*	1	1437	Hg
LCS1372877	*	1	1440	Hg
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1442	
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1447	
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1449	
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1450	
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1452	
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1454	
CCV	*	1	1456	Hg
CCB	*	1	1458	Hg
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1459	
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1501	
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1503	
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1505	
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1506	
MA01MW002 T	*	1	1508	Hg
MA01MW001 T	*	1	1510	Hg
MA01MW004 T	*	1	1512	Hg
MA01MW004-a T	*	1	1513	Hg

214102205 492

ANALYSIS RUN LOG

Lab Name: GCAL Contract: Start Date: 10/23/14

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205 End Date: 10/24/14

Instrument ID Number: FIMS1 Method: SW-846 7470A Method Type: AV Analysis Batch: 543612

				Analyte Symbols																																
Sample No.	**PF**	**D/F**	**Time**	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo	Ni	K	Se	Si	Ag	Na	Sr	Tl	Sn	Ti	V	Zn	Zr
MA01MW003 T	*	1	1515																	X														
CCV	*	1	1517																	X														
CCB	*	1	1519																	X														

214102205 493

ANALYSIS RUN LOG

Lab Name: GCAL Contract: Start Date: 10/27/14

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205 End Date: 10/27/14

Instrument ID Number: FIMS1 Method: SW-846 7470A Method Type: AV Analysis Batch: 543829

Sample No.	PF	D/F	Time	Analyte Symbols: Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo	Ni	K	Se	Si	Ag	Na	Sr	Tl	Sn	Ti	V	Zn	Zr
IICALB	*	1	1416																	X													
IICAL1	*	1	1417																	X													
IICAL2	*	1	1419																	X													
IICAL3	*	1	1421																	X													
IICAL4	*	1	1423																	X													
IICAL5	*	1	1424																	X													
ICV	*	1	1428																	X													
ICB	*	1	1430																	X													
MB1373154	*	1	1433																	X													
LCS1373155	*	1	1435																	X													
MA01MW004-a D	*	1	1437																	X													
MA01MW004-aMS D	*	1	1439																	X													
MA01MW004-aMSD D	*	1	1440																	X													
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1442																														
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1444																														
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1447																														
CCV	*	1	1449																	X													
CCB	*	1	1451																	X													
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1453																														
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1454																														
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1456																														
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1458																														
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1500																														
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1502																														
MA01MW002 D	*	1	1503																	X													
MA01MW001 D	*	1	1505																	X													
MA01MW004 D	*	1	1507																	X													

214102205 494

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: GCAL Contract: Start Date: 10/27/14

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205 End Date: 10/27/14

Instrument ID Number: FIMS1 Method: SW-846 7470A Method Type: AV Analysis Batch: 543829

Sample No.	PF	D/F	Time	Analyte Symbols: Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo	Ni	K	Se	Si	Ag	Na	Sr	Tl	Sn	Ti	V	Zn	Zr
MA01MW003 D	*	1	1509																	X														
CCV	*	1	1510																	X														
CCB	*	1	1512																	X														
M114MW002 D	*	1	1514																	X														
M114MW003 D	*	1	1516																	X														
M114MW004 D	*	1	1517																	X														
M114MW001 D	*	1	1519																	X														
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1521																															
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1523																															
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1524																															
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1526																															
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1528																															
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1530																															
CCV	*	1	1532																	X														
CCB	*	1	1533																	X														

214102205 495

ANALYSIS RUN LOG

Lab Name: GCAL Contract: Start Date: 10/28/14

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214102205 End Date: 10/28/14

Instrument ID Number: FIMS1 Method: SW-846 7470A Method Type: AV Analysis Batch: 543882

Sample No.	PF	D/F	Time	Analyte Symbols: Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo	Ni	K	Se	Si	Ag	Na	Sr	Tl	Sn	Ti	V	Zn	Zr
IICALB	*	1	1105																	X													
IICAL1	*	1	1106																	X													
IICAL2	*	1	1108																	X													
IICAL3	*	1	1110																	X													
IICAL4	*	1	1112																	X													
IICAL5	*	1	1113																	X													
ICV	*	1	1118																	X													
ICB	*	1	1120																	X													
MB1373158	*	1	1122																	X													
LCS1373159	*	1	1123																	X													
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1132																														
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1137																														
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1139																														
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1141																														
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1142																														
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1144																														
CCV	*	1	1147																	X													
CCB	*	1	1149																	X													
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1151																														
M114MW002 T	*	1	1153																	X													
M114MW003 T	*	1	1154																	X													
M114MW004 T	*	1	1156																	X													
M114MW001 T	*	1	1158																	X													
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1205																														
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1207																														
CCV	*	1	1213																	X													
CCB	*	1	1214																	X													

214102205 486

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: GCAL | Contract: | Start Date: 10/28/14

Lab Code: LA024 | Case No.: | SAS No.: | SDG No.: 214102205 | End Date: 10/28/14

Instrument ID Number: FIMS1 | Method: SW-846 7470A | Method Type: AV | Analysis Batch: 543882

				Analyte Symbols																																				
Sample No.	**PF**	**D/F**	**Time**	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo	Ni	K	Se	Si	Ag	Na	Sr	Tl	Sn	Ti	V	Zn	Zr
CCV	*	1	1234																	X														
CCB	*	1	1236																	X														
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1237																															
MB1373489	*	1	1241																	X														
LCS1373490	*	1	1243																	X														
MWQ-24 T	*	1	1244																	X														
MWQ-24 D	*	1	1246																	X														
MWQ-24-ms T	*	1	1248																	X														
MWQ-24-ms D	*	1	1250																	X														
MWQ-24-sd D	*	1	1251																	X														
MWQ-24-sd T	*	1	1253																	X														
CCV	*	1	1307																	X														
CCB	*	1	1309																	X														
CCV	*	1	1336																	X														
CCB	*	1	1338																	X														
MA02MW001D T	*	1	1340																	X														
MA02MW001D D	*	1	1341																	X														
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1348																															
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1352																															
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1354																															
ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		1	1355																															
CCV	*	1	1357																	X														
CCB	*	1	1359																	X														

214102205 497

FORM XIV - IN

C:\ICPMH\1\DATA\14J29n00.B\QCTUNE00.D

QC Tune Report

Data File: C:\ICPMH\1\7500\QCTUNE.D
Date Acquired: 29 Oct 2014 01:30:27 pm
Operator: AWG,ICPMS1
Misc Info:
Vial Number: 1301
Current Method: C:\ICPMH\1\METHODS\TUNE2008.m

Minimum Response(CPS)

Element	Actual	Required	Flag
7 Li	26420.00	1.00	
9 Be	4468.90	1.00	
24 Mg	21725.50	1.00	
25 Mg	2885.49	1.00	
26 Mg	3273.88	1.00	
59 Co	57388.90	1.00	
89 Y	48009.50	1.00	
115 In	574336.00	1.00	
140 Ce	45024.00	1.00	
205 Tl	23334.70	1.00	
206 Pb	7628.14	1.00	
207 Pb	6828.84	1.00	
208 Pb	16283.20	1.00	

RSD (%)

Element	Actual	Required	Flag
7 Li	0.62	5.00	
9 Be	1.27	5.00	
24 Mg	1.12	5.00	
25 Mg	1.60	5.00	
26 Mg	0.32	5.00	
59 Co	0.84	5.00	
89 Y	0.80	5.00	
115 In	2.64	5.00	
140 Ce	1.17	5.00	
205 Tl	0.57	5.00	
206 Pb	1.84	5.00	
207 Pb	0.67	5.00	
208 Pb	0.34	5.00	

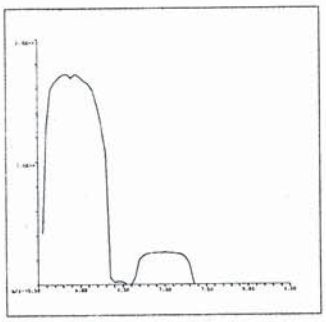
Ion Ratio

Element	Actual	Required	Flag

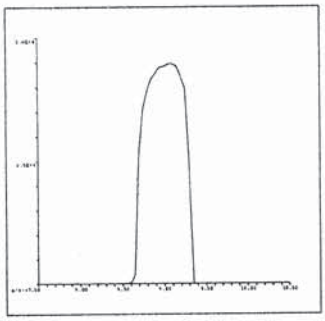
Maximum Bkg. Count(CPS)

Element	Actual	Required	Flag

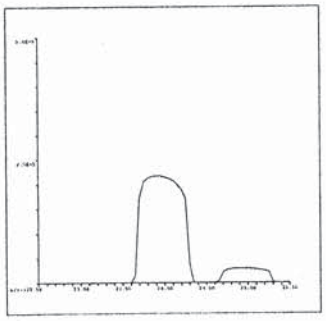
214102205 488



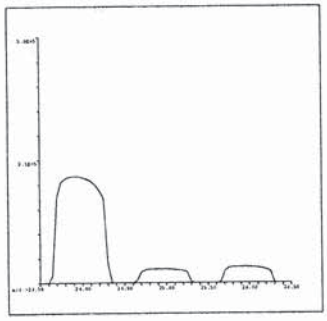
7 Li
Mass Calib.
Actual: 7.00
Required: 6.90-7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.80
Flag:



9 Be
Mass Calib.
Actual: 9.05
Required: 8.90-9.10
Flag:
Peak Width
Actual: 0.60
Required: 0.80
Flag:

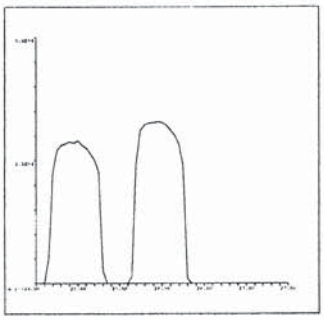


24 Mg
Mass Calib.
Actual: 23.90
Required: 23.90-24.10
Flag:
Peak Width
Actual: 0.65
Required: 0.80
Flag:

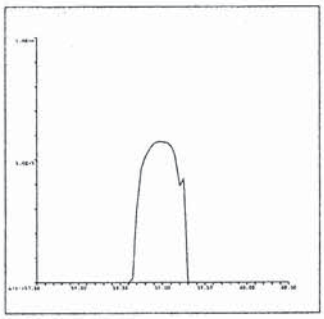


25 Mg
Mass Calib.
Actual: 24.90
Required: 24.90-25.10
Flag:
Peak Width
Actual: 0.65
Required: 0.80
Flag:

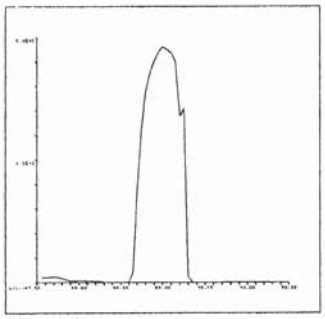
214102205 489



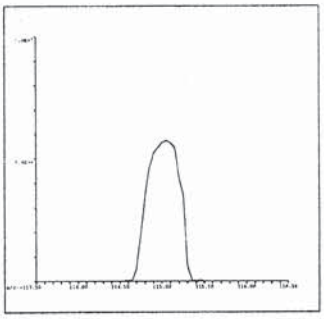
26 Mg
Mass Calib.
Actual: 25.90
Required: 25.90-26.10
Flag:
Peak Width
Actual: 0.55
Required: 0.80
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90-59.10
Flag:
Peak Width
Actual: 0.55
Required: 0.80
Flag:

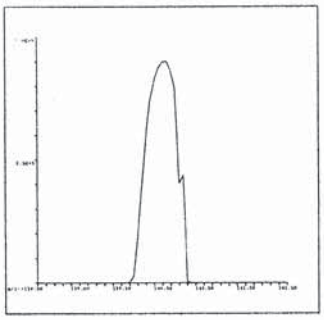


89 Y
Mass Calib.
Actual: 89.00
Required: 88.90-89.10
Flag:
Peak Width
Actual: 0.55
Required: 0.80
Flag:

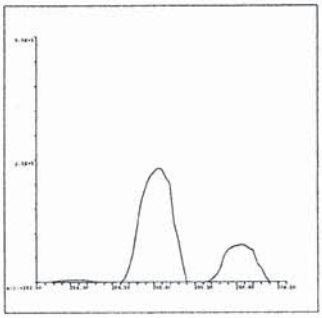


115 In
Mass Calib.
Actual: 115.05
Required: 114.90-115.10
Flag:
Peak Width
Actual: 0.60
Required: 0.80
Flag:

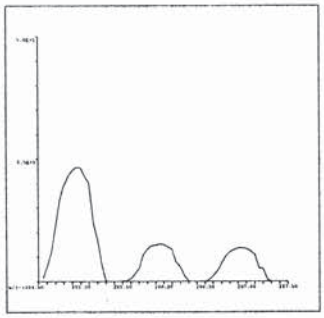
214102205 490



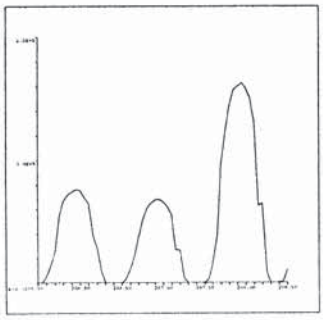
140 Ce
Mass Calib.
Actual: 140.00
Required: 139.90-140.10
Flag:
Peak Width
Actual: 0.55
Required: 0.80
Flag:



205 Tl
Mass Calib.
Actual: 204.95
Required: 204.90-205.10
Flag:
Peak Width
Actual: 0.65
Required: 0.80
Flag:



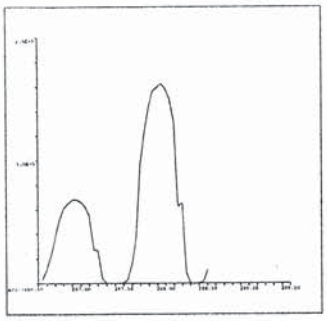
206 Pb
Mass Calib.
Actual: 205.95
Required: 205.90-206.10
Flag:
Peak Width
Actual: 0.65
Required: 0.80
Flag:



207 Pb
Mass Calib.
Actual: 206.95
Required: 206.90-207.10
Flag:
Peak Width
Actual: 0.60
Required: 0.80
Flag:

214102205 491

C:\ICPMH\1\DATA\14J29n00.B\QCTUNE00.D



208 Pb
Mass Calib.
Actual: 207.95
Required: 207.90-208.10
Flag:
Peak Width
Actual: 0.60
Required: 0.80
Flag:

QC Tune Result:Pass

214102205 492

Tune Step	Mass	Name	R	a	b (blank)	DL	BEC	Units
2	7	Li	0.999996693	0.000254004	0.002111627	4.675728934	8.313363013	ppb
2	9	Be	0.999993085	0.000299595	0	0	0	ppb
2	11	B	0.999995199	0.000115429	7.44373E-05	0.446363664	0.644873922	ppb
2	23	Na	0.999986171	0.003730078	0.049469217	0.666408996	13.26224897	ppb
2	24	Mg	0.999990423	0.001805037	0.000672147	0.172691919	0.372372847	ppb
2	27	Al	0.999992037	0.000684678	0.000198233	0.188429313	0.289527196	ppb
2	29	Si	0.999990526	3.24514E-05	0.016675655	87.19724503	513.8661054	ppb
2	39	K	0.999999919	0.001773065	0.122906142	10.57681602	69.31845553	ppb
2	44	Ca	0.999998612	8.91966E-05	0.004239724	8.240243779	47.53232811	ppb
2	47	Ti	0.999995232	0.000677657	5.43553E-05	0.125677246	0.08021069	ppb
2	51	V	0.999998526	0.021585599	0.00170719	0.020253605	0.079089309	ppb
2	52	Cr	0.999996313	0.025774261	0.000830522	0.00594302	0.03222292	ppb
2	55	Mn	0.999997443	0.013956852	0.000646585	0.005971627	0.046327456	ppb
2	57	Fe	0.999993739	0.000542338	0.000476377	0.485766784	0.878376656	ppb
2	59	Co	0.999993268	0.040407439	0.000340549	0.009688103	0.008427887	ppb
2	60	Ni	0.999989195	0.010599527	0.00031006	0.010059513	0.029252204	ppb
2	63	Cu	0.999977426	0.028625554	0.001531521	0.031142643	0.053501889	ppb
2	66	Zn	0.99998671	0.004684724	0.004124617	0.242932859	0.880439616	ppb
2	75	As	0.999997115	0.003565887	0.000124342	0.019849246	0.034869847	ppb
2	78	Se	0.999999517	0.0003192	0.000215682	0.15904181	0.675695737	ppb
2	88	Sr	0.999998519	0.019550909	0.001504544	0.047974644	0.076955194	ppb
2	90	Zr	0.999987525	0.002072864	1.49138E-05	0.005509316	0.007194765	ppb
2	95	Mo	0.999998063	0.001153461	2.63749E-05	0.022246504	0.022865865	ppb
2	107	Ag	0.999992845	0.006795722	5.01717E-05	0.001692484	0.007382839	ppb
2	111	Cd	0.999999977	0.000507034	5.73993E-06	0.014391026	0.011320599	ppb
2	120	Sn	0.999999826	0.003564432	0.000272616	0.02370058	0.076482377	ppb
2	121	Sb	0.999996718	0.00159135	0.000178666	0.011584437	0.112273433	ppb
2	137	Ba	0.999998347	0.000545411	1.03211E-05	0.030742342	0.018923457	ppb
2	156	Gd						ppb
2	205	Tl	0.999999499	0.005993983	0.000172369	0.022099585	0.028757061	ppb
2	208	Pb	0.999996513	0.005186736	7.98638E-05	0.011474446	0.0153977	ppb
2	45	Sc						ppb
2	72	Ge						ppb
2	103	Rh						ppb
2	115	In						ppb
2	159	Tb						ppb
2	175	Lu						ppb
2	209	Bi						ppb

C:\ICPMH\1\DATA\14J30m00.B\QCTUNE00.D

QC Tune Report

Data File: C:\ICPMH\1\7500\QCTUNE.D
Date Acquired: 30 Oct 2014 12:05:31 pm
Operator: AWG,ICPMS1
Misc Info:
Vial Number: 1301
Current Method: C:\ICPMH\1\METHODS\TUNE2008.m

Minimum Response(CPS)

Element	Actual	Required	Flag
7 Li	27284.70	1.00	
9 Be	4235.23	1.00	
24 Mg	22607.70	1.00	
25 Mg	3024.78	1.00	
26 Mg	3439.06	1.00	
59 Co	54389.60	1.00	
89 Y	49127.00	1.00	
115 In	615104.00	1.00	
140 Ce	45587.30	1.00	
205 Tl	22990.40	1.00	
206 Pb	7594.96	1.00	
207 Pb	6789.84	1.00	
208 Pb	16129.50	1.00	

RSD (%)

Element	Actual	Required	Flag
7 Li	1.37	5.00	
9 Be	0.97	5.00	
24 Mg	0.52	5.00	
25 Mg	2.06	5.00	
26 Mg	2.04	5.00	
59 Co	0.24	5.00	
89 Y	0.86	5.00	
115 In	3.32	5.00	
140 Ce	0.86	5.00	
205 Tl	0.97	5.00	
206 Pb	1.25	5.00	
207 Pb	0.87	5.00	
208 Pb	1.55	5.00	

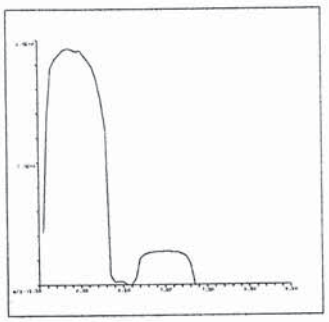
Ion Ratio

Element	Actual	Required	Flag

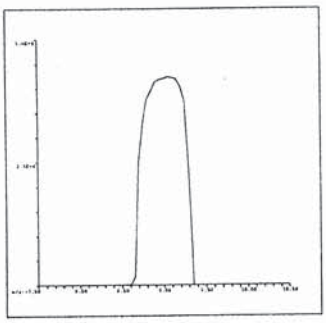
Maximum Bkg. Count(CPS)

Element	Actual	Required	Flag

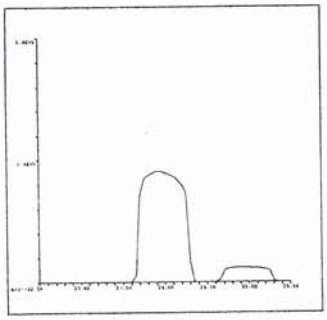
214102295 494



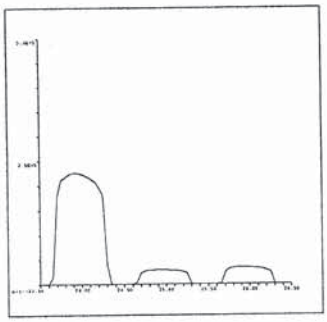
7 Li
Mass Calib.
Actual: 7.00
Required: 6.90-7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.80
Flag:



9 Be
Mass Calib.
Actual: 9.05
Required: 8.90-9.10
Flag:
Peak Width
Actual: 0.60
Required: 0.80
Flag:

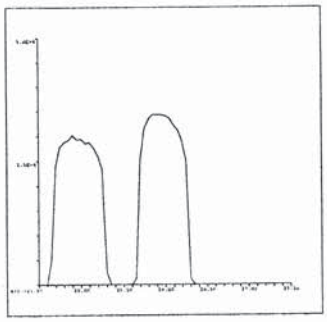


24 Mg
Mass Calib.
Actual: 23.95
Required: 23.90-24.10
Flag:
Peak Width
Actual: 0.65
Required: 0.80
Flag:

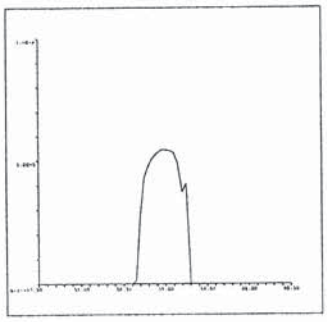


25 Mg
Mass Calib.
Actual: 24.90
Required: 24.90-25.10
Flag:
Peak Width
Actual: 0.65
Required: 0.80
Flag:

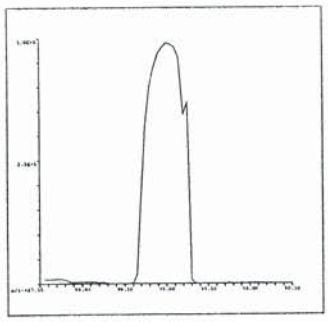
214102205 495



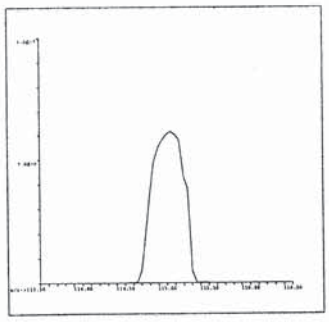
26 Mg
Mass Calib.
Actual: 25.95
Required: 25.90-26.10
Flag:
Peak Width
Actual: 0.55
Required: 0.80
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90-59.10
Flag:
Peak Width
Actual: 0.55
Required: 0.80
Flag:

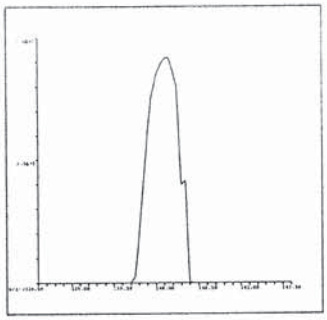


89 Y
Mass Calib.
Actual: 89.00
Required: 88.90-89.10
Flag:
Peak Width
Actual: 0.55
Required: 0.80
Flag:

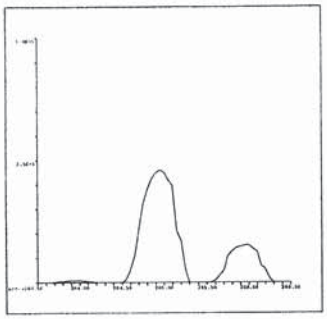


115 In
Mass Calib.
Actual: 115.05
Required: 114.90-115.10
Flag:
Peak Width
Actual: 0.60
Required: 0.80
Flag:

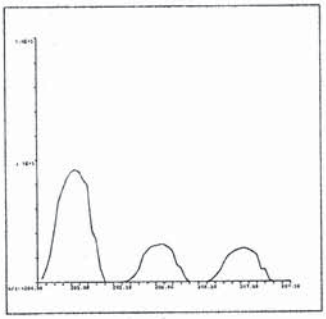
214102205 496



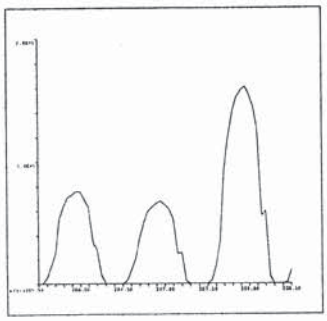
140 Ce
Mass Calib.
Actual: 140.00
Required: 139.90-140.10
Flag:
Peak Width
Actual: 0.55
Required: 0.80
Flag:



205 Tl
Mass Calib.
Actual: 204.95
Required: 204.90-205.10
Flag:
Peak Width
Actual: 0.65
Required: 0.80
Flag:



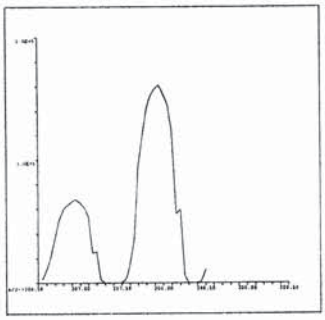
206 Pb
Mass Calib.
Actual: 205.95
Required: 205.90-206.10
Flag:
Peak Width
Actual: 0.65
Required: 0.80
Flag:



207 Pb
Mass Calib.
Actual: 206.95
Required: 206.90-207.10
Flag:
Peak Width
Actual: 0.60
Required: 0.80
Flag:

214102205 497

C:\ICPMH\1\DATA\14J30m00.B\QCTUNE00.D



208 Pb
Mass Calib.
Actual: 207.95
Required: 207.90-208.10
Flag:
Peak Width
Actual: 0.60
Required: 0.80
Flag:

QC Tune Result:Pass

214102205 498

C:\ICPMH\1\DATA\14J30m00.B\QCTUNE00.D

Replicated Data: Tune #1

Mass	Count(CPS)				
6	1335946.00	1321186.00	1360881.00	1361341.00	1363636.00
7	168318.00	164364.50	167243.20	168195.80	168541.80
8	2.00	6.50	8.50	9.50	6.50
9	24387.13	24480.49	24365.51	24361.93	24699.78
24	129703.30	129740.10	128916.00	129743.40	129583.90
25	17106.36	16873.98	16955.46	17249.66	17006.64
26	19348.99	19182.08	18939.58	18813.83	19087.29
59	280978.59	286071.59	282819.69	283675.19	286385.59
88	3919.66	3933.66	4110.70	4223.79	4207.77
89	246151.30	249196.41	248202.50	249508.80	245338.41
90	341.03	329.52	581.97	332.02	350.53
101	88.00	143.51	185.01	216.51	192.01
102	206.01	298.52	400.03	416.53	367.03
103	2673645.00	2538955.00	2616573.00	2669948.00	2680453.00
115	2811769.00	2637657.00	2761524.00	2798915.00	2831604.00
139	37.50	27.50	27.00	34.00	25.00
140	197628.50	201471.09	201694.20	202283.91	201966.09
141	20.00	13.50	13.50	9.50	13.50
204	1939.36	1927.34	2034.88	1937.85	1967.36
205	103903.70	103548.40	103499.70	102533.80	103857.20
206	32863.48	33168.28	33155.70	33446.73	33037.09
207	30500.82	31000.00	30643.45	30719.75	31013.26

C:\ICPMH\1\DATA\14J30m00.B\QCTUNE00.D

Mass	Count(CPS)				
208	70309.51	71985.43	72136.39	73021.27	72725.40

214102295 500

Tune Step	Mass	Name	R	a	b (blank)	DL	BEC	Units
2	7	Li	0.999992752	0.00022477	0.002018977	0.81988579	8.982422626	ppb
2	9	Be	0.999998885	0.000264034	4.22828E-06	0.016828368	0.016014181	ppb
2	11	B	0.999997541	9.96118E-05	9.46553E-05	0.460297051	0.950241164	ppb
2	23	Na	0.999999306	0.003694674	0.073639762	1.873042258	19.93132997	ppb
2	24	Mg	0.999999944	0.001783035	0.001614493	0.365725498	0.905474508	ppb
2	27	Al	0.99999944	0.000671955	0.000543518	0.136690289	0.808860846	ppb
2	29	Si	0.99999853	3.02622E-05	0.017144932	10.14019439	566.5465308	ppb
2	39	K	0.999994316	0.001776503	0.123877386	2.813553726	69.73104691	ppb
2	44	Ca	0.999999606	8.75459E-05	0.005000591	4.951126997	57.11963792	ppb
2	47	Ti	0.999999428	0.000666038	1.69584E-05	0.066151335	0.025461632	ppb
2	51	V	0.999999631	0.020987511	0.000943313	0.025181195	0.044946375	ppb
2	52	Cr	0.999999997	0.02450263	0.000614761	0.004122808	0.02508958	ppb
2	55	Mn	0.999999746	0.013049904	0.001334194	0.020404422	0.102237815	ppb
2	57	Fe	0.999998972	0.000507805	0.000313386	1.133063776	0.617139629	ppb
2	59	Co	0.999998586	0.037995707	0.000574003	0.015477725	0.01510705	ppb
2	60	Ni	0.999994481	0.009791731	0.000274314	0.009845901	0.028014869	ppb
2	63	Cu	0.999995737	0.02643972	0.001723053	0.014983214	0.065169124	ppb
2	66	Zn	0.999997043	0.004376031	0.004376456	0.15327806	1.000097168	ppb
2	75	As	0.999999554	0.003381715	9.62822E-05	0.005825446	0.028471411	ppb
2	78	Se	0.999944936	0.000295435	0.000260325	0.15496579	0.881159768	ppb
2	88	Sr	0.999999563	0.018679374	0.001563175	0.016277463	0.083684527	ppb
2	90	Zr	0.999831144	0.002278578	1.81167E-05	0.001625154	0.00795089	ppb
2	95	Mo	0.999989346	0.001131797	1.75311E-05	0.019207619	0.01548965	ppb
2	107	Ag	0.999998752	0.006232655	3.05858E-05	0.001176366	0.004907346	ppb
2	111	Cd	0.999994136	0.000499815	3.93772E-06	0.008157768	0.007878352	ppb
2	120	Sn	0.999999377	0.003457896	0.000232514	0.043402095	0.067241457	ppb
2	121	Sb	0.999985651	0.001577643	8.8622E-05	0.016076795	0.056173692	ppb
2	137	Ba	0.999989996	0.000550398	1.02775E-05	0.014668639	0.018672789	ppb
2	156	Gd						ppb
2	205	Tl	0.999999841	0.005759575	0.000271357	0.011895351	0.047114031	ppb
2	208	Pb	0.999992559	0.005048024	4.95057E-05	0.007407946	0.009806947	ppb
2	45	Sc						ppb
2	72	Ge						ppb
2	103	Rh						ppb
2	115	In						ppb
2	159	Tb						ppb
2	175	Lu						ppb
2	209	Bi						ppb

C:\ICPMH\1\DATA\14J31n00.B\QCTUNE00.D

QC Tune Report

Data File: C:\ICPMH\1\7500\QCTUNE.D
Date Acquired: 31 Oct 2014 01:09:23 pm
Operator: AWG,ICPMS1
Misc Info:
Vial Number: 1301
Current Method: C:\ICPMH\1\METHODS\TUNE2008.m

Minimum Response(CPS)

Element	Actual	Required	Flag
7 Li	18781.30	1.00	
9 Be	3024.91	1.00	
24 Mg	17079.00	1.00	
25 Mg	2238.76	1.00	
26 Mg	2603.34	1.00	
59 Co	46066.00	1.00	
89 Y	43630.60	1.00	
115 In	573311.00	1.00	
140 Ce	42042.70	1.00	
205 Tl	21111.90	1.00	
206 Pb	6865.61	1.00	
207 Pb	6257.00	1.00	
208 Pb	14898.90	1.00	

RSD (%)

Element	Actual	Required	Flag
7 Li	0.68	5.00	
9 Be	1.84	5.00	
24 Mg	0.73	5.00	
25 Mg	2.00	5.00	
26 Mg	1.77	5.00	
59 Co	1.33	5.00	
89 Y	0.41	5.00	
115 In	1.31	5.00	
140 Ce	1.01	5.00	
205 Tl	1.34	5.00	
206 Pb	1.93	5.00	
207 Pb	1.09	5.00	
208 Pb	1.21	5.00	

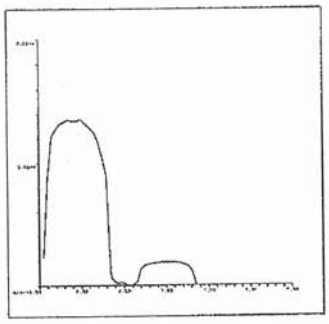
Ion Ratio

Element	Actual	Required	Flag

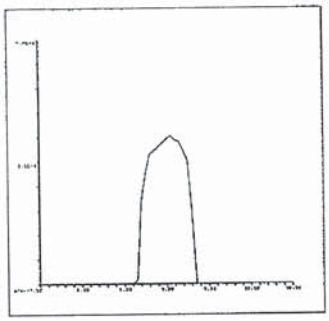
Maximum Bkg. Count(CPS)

Element	Actual	Required	Flag

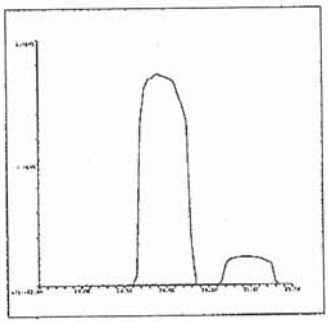
214102295 502



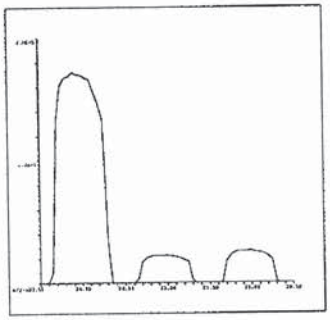
7 Li
Mass Calib.
Actual: 7.00
Required: 6.90-7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.80
Flag:



9 Be
Mass Calib.
Actual: 9.05
Required: 8.90-9.10
Flag:
Peak Width
Actual: 0.60
Required: 0.80
Flag:

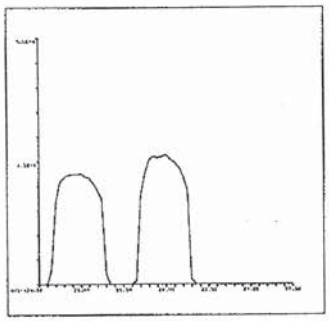


24 Mg
Mass Calib.
Actual: 23.95
Required: 23.90-24.10
Flag:
Peak Width
Actual: 0.65
Required: 0.80
Flag:

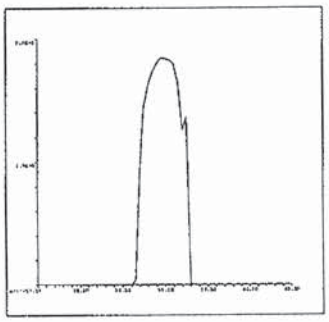


25 Mg
Mass Calib.
Actual: 24.95
Required: 24.90-25.10
Flag:
Peak Width
Actual: 0.65
Required: 0.80
Flag:

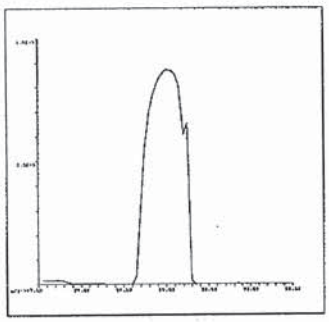
214102205 503



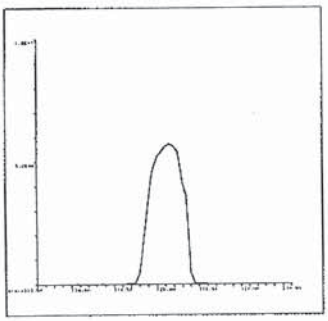
26 Mg
Mass Calib.
Actual: 25.95
Required: 25.90-26.10
Flag:
Peak Width
Actual: 0.55
Required: 0.80
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90-59.10
Flag:
Peak Width
Actual: 0.55
Required: 0.80
Flag:

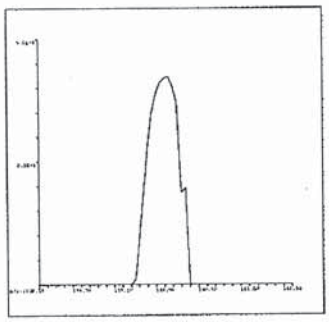


89 Y
Mass Calib.
Actual: 89.00
Required: 88.90-89.10
Flag:
Peak Width
Actual: 0.55
Required: 0.80
Flag:

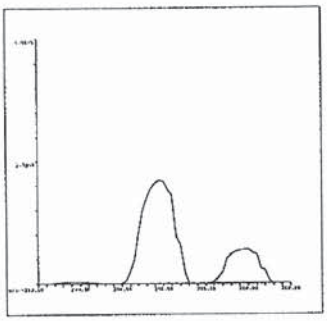


115 In
Mass Calib.
Actual: 115.05
Required: 114.90-115.10
Flag:
Peak Width
Actual: 0.60
Required: 0.80
Flag:

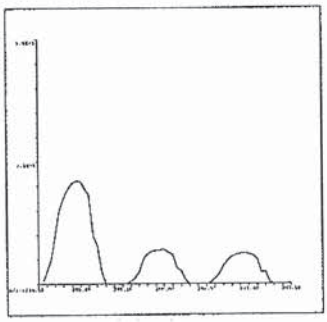
214102205 504



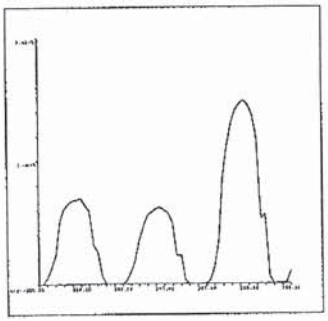
140 Ce
Mass Calib.
Actual: 140.00
Required: 139.90-140.10
Flag:
Peak Width
Actual: 0.55
Required: 0.80
Flag:



205 Tl
Mass Calib.
Actual: 204.95
Required: 204.90-205.10
Flag:
Peak Width
Actual: 0.65
Required: 0.80
Flag:

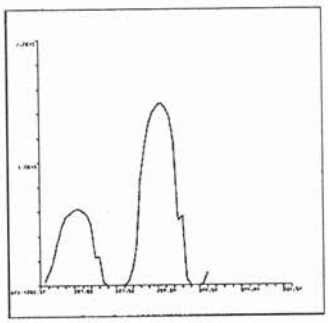


206 Pb
Mass Calib.
Actual: 205.95
Required: 205.90-206.10
Flag:
Peak Width
Actual: 0.65
Required: 0.80
Flag:



207 Pb
Mass Calib.
Actual: 206.95
Required: 206.90-207.10
Flag:
Peak Width
Actual: 0.60
Required: 0.80
Flag:

C:\ICPMH\1\DATA\14J31n00.B\QCTUNE00.D



208 Pb
Mass Calib.
Actual: 207.95
Required: 207.90-208.10
Flag:
Peak Width
Actual: 0.60
Required: 0.80
Flag:

QC Tune Result:Pass

214102205 506

C:\ICPMH\1\DATA\14J31n00.B\QCTUNE00.D

Replicated Data: Tune #1

Mass	Count(CPS)				
6	941733.63	937873.31	951956.50	934524.38	941965.88
7	114422.90	113552.60	115277.50	115121.80	113442.80
8	5.00	6.50	4.50	5.00	8.00
9	16793.28	17027.69	16900.00	16781.21	16734.21
24	98378.35	98047.74	97622.00	97922.76	97613.51
25	12733.76	12634.57	12652.63	12739.24	12967.59
26	14407.15	14355.53	14232.83	14222.24	14575.83
59	240536.70	241780.09	238926.50	239832.91	235392.91
88	3491.91	3488.93	3517.92	3345.83	3417.35
89	217482.20	217943.91	219909.00	217791.80	219194.70
90	303.52	370.62	315.02	326.12	340.54
101	110.01	103.51	105.01	94.50	102.01
102	229.52	204.01	205.51	188.01	189.01
103	2435611.00	2388184.00	2404030.00	2358722.00	2403480.00
115	2616798.00	2592879.00	2593906.00	2531552.00	2627431.00
139	31.50	31.00	33.00	36.50	28.00
140	184803.41	186281.30	186133.59	184838.59	185444.41
141	14.50	18.50	10.50	13.00	13.50
204	1856.83	1782.30	1849.31	1780.30	1795.30
205	94297.20	96335.17	94972.21	95806.31	95345.62
206	30713.70	30924.10	30647.60	31000.57	30401.31
207	28249.73	28804.49	28697.19	28116.07	28668.59

10/31/2014 PM 01:14

214102205 507

C:\ICPMH\1\DATA\14J31n00.B\QCTUNE00.D

Mass	Count(CPS)				
208	67280.54	67370.73	66860.98	67305.31	67676.11

214102205 508

Tune Step	Mass	Name	R	a	b (blank)	DL	BEC	Units
2	7	Li	0.999961724	0.000175668	0.001937749	4.94583723	11.03073318	ppb
2	9	Be	0.999993585	0.000221005	1.08523E-06	0.025515399	0.004910441	ppb
2	11	B	0.999994815	8.34606E-05	4.54444E-05	0.498093877	0.544500353	ppb
2	23	Na	0.999999434	0.00343314	0.075436492	3.553611462	21.9730319	ppb
2	24	Mg	0.999999249	0.001638331	0.001025007	1.146103299	0.62564085	ppb
2	27	Al	0.999998185	0.000616623	0.000353235	0.519883488	0.572853734	ppb
2	29	Si	0.999997483	2.64783E-05	0.016361392	45.02488057	617.9165676	ppb
2	39	K	0.999997909	0.001681287	0.12373504	12.31009381	73.59540924	ppb
2	44	Ca	0.999999863	8.43329E-05	0.00137527	5.378097132	16.30762411	ppb
2	47	Ti	0.999922201	0.000633365	0	0	0	ppb
2	51	V	0.999999506	0.020703912	0.00096065	0.014365209	0.046399459	ppb
2	52	Cr	0.999999452	0.024121238	0.000704472	0.010255193	0.029205458	ppb
2	55	Mn	0.999999104	0.012744049	0.001561072	0.087165938	0.1224942	ppb
2	57	Fe	0.999999863	0.0005	0.000675934	0.291848354	1.351869368	ppb
2	59	Co	0.999991077	0.037949556	0.000472247	0.012703038	0.012444082	ppb
2	60	Ni	0.99999573	0.00985214	0.001148058	0.016662295	0.116528821	ppb
2	63	Cu	0.999989259	0.026560005	0.004525282	0.15028458	0.170379556	ppb
2	66	Zn	0.999994629	0.004373363	0.001619804	0.097320153	0.37037947	ppb
2	75	As	0.999999933	0.003456837	8.31163E-05	0.005815391	0.024044038	ppb
2	78	Se	0.999996037	0.000281837	0.000244065	0.097271153	0.8659804	ppb
2	88	Sr	0.999999967	0.019143194	0.001150859	0.050066525	0.060118461	ppb
2	90	Zr	0.999843516	0.002233264	1.55707E-05	0.008503222	0.006972155	ppb
2	95	Mo	0.999991956	0.001091094	1.07291E-05	0.012663718	0.009833375	ppb
2	107	Ag	0.99999858	0.005973712	4.37392E-05	0.003628723	0.007321938	ppb
2	111	Cd	0.999999671	0.000476368	1.351E-06	0.001738865	0.002836051	ppb
2	120	Sn	0.99999969	0.003415414	8.76635E-05	0.029279741	0.02566701	ppb
2	121	Sb	0.999994511	0.001515225	5.83561E-05	0.023195287	0.03851316	ppb
2	137	Ba	0.999998707	0.000533749	9.60845E-06	0.01213969	0.018001826	ppb
2	156	Gd						ppb
2	205	Tl	0.999998806	0.005790476	7.50769E-05	0.0083826	0.012965587	ppb
2	208	Pb	0.999999971	0.004880319	5.15566E-05	0.011501796	0.010564187	ppb
2	45	Sc						ppb
2	72	Ge						ppb
2	103	Rh						ppb
2	115	In						ppb
2	159	Tb						ppb
2	175	Lu						ppb
2	209	Bi						ppb

US EPA Tune Check Sample Report

Batch Folder C:\Agilent\ICPMH\1\DATA\2141103A.b
Report Comment
Instrument Name G8403A JP14170244

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
7	3155	0.98	5.00	
89	29805	0.49	5.00	
140	25150	0.65	5.00	
205	12945	0.96	5.00	
59	41695	0.61	5.00	
9	1522	1.39	5.00	
115	32117	1.96	5.00	
24	17560	0.42	5.00	
25	2482	1.03	5.00	
26	5601	0.92	5.00	
208	9323	0.52	5.00	
206	4327	1.09	5.00	
207	3951	1.02	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
7	3172	3124	3151	3199	3130
89	30031	29673	29854	29788	29681
140	25162	25257	25293	25161	24876
205	13045	13075	12941	12897	12766
59	41795	41932	41885	41337	41529
9	1521	1523	1490	1550	1526
115	32760	32484	32099	32148	31096
24	17568	17573	17672	17510	17478
25	2516	2496	2449	2468	2482
26	5649	5631	5525	5629	5571
208	9332	9387	9285	9266	9343
206	4342	4373	4367	4279	4275
207	4010	3959	3950	3899	3938

Integration Time [sec] = 0.1

Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
7	513	7.05	6.9 - 7.1		0.782	0.800	
89	5367	89.00	88.9 - 89.1		0.738	0.800	
140	4771	140.05	139.9 - 140.1		0.733	0.800	
205	2390	205.00	204.9 - 205.1		0.754	0.800	
59	7023	58.95	58.9 - 59.1		0.781	0.800	
9	256	9.00	8.9 - 9.1		0.782	0.800	
115	5965	115.00	114.9 - 115.1		0.735	0.800	
24	2876	23.95	23.9 - 24.1		0.777	0.800	
25	410	24.95	24.9 - 25.1		0.784	0.800	
26	911	25.95	25.9 - 26.1		0.748	0.800	
208	1707	208.00	207.9 - 208.1		0.772	0.800	
206	796	206.00	205.9 - 206.1		0.757	0.800	
207	728	207.00	206.9 - 207.1		0.740	0.800	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 344.3 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1550	W	Carrier Gas	0.90	L/min			
RF Matching	1.80	V	Option Gas	0.0	%			
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps			
S/C Temp	2	°C						

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	9.8	V			
Extract 2	-200.0	V	Cell Entrance	-30	V			
Omega Bias	-105	V	Cell Exit	-50	V			
Deflect	14.4	V						

Cell Parameters

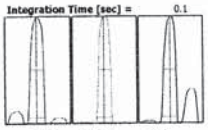
ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	false		3rd Gas Flow	0	%			
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	170	V			
Energy Discrimination	3.0	V						

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
59	10692	1.55	5.00	
89	3664	2.07	5.00	
205	8848	1.01	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	10549	10707	10517	10762	10924
89	3545	3653	3672	3749	3703
205	8918	8918	8852	8700	8851

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	W-X% (Flag)
59	1814	59.000	58.9 - 59.1		0.776	0.800	
89	650	89.000	88.9 - 89.1		0.731	0.800	
205	1605	205.000	204.9 - 205.1		0.753	0.800	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 112.7 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1550	W	Carrier Gas	0.90	L/min			
RF Matching	1.80	V	Option Gas	0.0	%			
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps			
S/C Temp	2	°C						

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.7	V			
Extract 2	-200.0	V	Cell Entrance	-40	V			
Omega Bias	-100	V	Cell Exit	-60	V			
Deflect	2.8	V						

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	true		3rd Gas Flow	0	%			
He Flow	4.3	mL/min	OctP Bias	-18.0	V			
H2 Flow	0.0	mL/min	OctP RF	200	V			
Energy Discrimination	4.0	V						

214102205 510

Tune Step	Mass	Name	R	a	b (blank)	DL	BEC	Units
1	7	Li	0.999972111	0.0008827	0.007707201	0.287479963	8.731396715	ppb
1	9	Be	0.999991525	0.000513981	1.04E-07	0.001054486	0.000202936	ppb
1	11	B	0.999994221	0.000405552	8.08E-05	0.016430362	0.199223667	ppb
2	23	Na	0.999995795	0.003656135	0.089372234	1.033732929	24.44445604	ppb
2	24	Mg	0.999993894	0.001867986	0.001131489	0.167072825	0.605726876	ppb
2	27	Al	0.99999492	0.000694031	0.00060702	0.426497092	0.874629806	ppb
2	29	Si	0.999960527	2.33E-05	0.063087253	147.7841777	2707.526964	ppb
2	39	K	0.999999964	0.001654596	0.211957791	10.59575137	128.1024276	ppb
2	44	Ca	0.999999298	8.21E-05	0.00199877	3.308602567	24.33524146	ppb
2	47	Ti	0.999997761	0.000653496	5.60E-05	0.112783063	0.085768103	ppb
2	51	V	0.999999676	0.030588094	0.002533322	0.017257812	0.082820528	ppb
2	52	Cr	0.999997816	0.03722007	0.010716691	0.056094164	0.287927752	ppb
2	55	Mn	0.999999279	0.018540188	0.001735132	0.033003497	0.093587608	ppb
2	57	Fe	0.999997788	0.000736122	0.000939436	1.269705111	1.276195444	ppb
2	59	Co	0.999991026	0.065631492	0.000337107	0.003152128	0.005136356	ppb
2	60	Ni	0.99999621	0.018352908	0.000810553	0.019092989	0.044164822	ppb
2	63	Cu	0.999990788	0.05061332	0.003821926	0.014640944	0.075512259	ppb
2	66	Zn	0.999999704	0.008414039	0.012847029	1.133652309	1.526856358	ppb
2	75	As	0.999999556	0.007584838	0.000220717	0.022755733	0.029099794	ppb
2	78	Se	0.999987127	0.000366458	0.000144293	0.040640692	0.393750766	ppb
1	88	Sr	0.999983751	0.036223927	0.000512513	0.007380872	0.014148457	ppb
1	90	Zr	0.99999621	0.022894137	0.000168051	0.001791544	0.007340355	ppb
1	95	Mo	0.999999934	0.001306936	2.31E-06	6.00E-05	0.001769721	ppb
1	107	Ag	0.999999201	0.003548792	8.35E-06	0.000969538	0.002354297	ppb
1	111	Cd	0.999999953	0.000729862	1.93E-06	8.96E-05	0.002641336	ppb
1	118	(Sn)	0.999999859	0.001993069	4.15E-05	0.003571936	0.020831439	ppb
2	118	(Sn)	0.999997843	0.002601446	6.84E-05	0.026863108	0.026301398	ppb
2	120	Sn	0.999997958	0.003718017	0.000110711	0.024653974	0.029776959	ppb
1	121	Sb	0.999996184	0.00319964	0.00010216	0.001370882	0.031928719	ppb
1	137	Ba	0.999999071	0.001011325	1.26E-05	0.007051251	0.012467645	ppb
2	156	[Se]						ppb
1	205	Tl	0.999999933	0.006700993	5.14E-06	0.00133752	0.000766372	ppb
1	206	(Pb)	0.999998436	0.002181426	4.98E-05	0.008297003	0.022827637	ppb
1	207	(Pb)	0.999999766	0.001973786	3.78E-05	0.014596458	0.019144353	ppb
1	208	Pb	0.999999973	0.008886939	0.000164418	0.006576206	0.018501087	ppb
1	6	(Li)						
1	45	Sc						
2	45	Sc						
1	72	Ge						
2	72	Ge						
1	103	Rh						
2	103	Rh						
1	115	In						
2	115	In						
1	159	Tb						
2	159	Tb						
1	175	Lu						
2	175	Lu						
1	209	Bi						
2	209	Bi						

C:\ICPMH\1\DATA\14K03k00.B\QCTUNE00.D

QC Tune Report

Data File: C:\ICPMH\1\7500\QCTUNE.D
Date Acquired: 3 Nov 2014 10:07:53 am
Operator: AWG,ICPMS1
Misc Info:
Vial Number: 1301
Current Method: C:\ICPMH\1\METHODS\TUNE2008.m

Minimum Response(CPS)

Element	Actual	Required	Flag
7 Li	26322.50	1.00	
9 Be	4002.18	1.00	
24 Mg	27369.50	1.00	
25 Mg	3587.39	1.00	
26 Mg	4080.66	1.00	
59 Co	53666.90	1.00	
89 Y	46746.30	1.00	
115 In	640794.00	1.00	
140 Ce	50281.70	1.00	
205 Tl	33432.30	1.00	
206 Pb	11074.20	1.00	
207 Pb	10014.20	1.00	
208 Pb	24071.20	1.00	

RSD (%)

Element	Actual	Required	Flag
7 Li	1.50	5.00	
9 Be	1.29	5.00	
24 Mg	1.53	5.00	
25 Mg	2.04	5.00	
26 Mg	1.85	5.00	
59 Co	0.43	5.00	
89 Y	0.88	5.00	
115 In	0.98	5.00	
140 Ce	0.92	5.00	
205 Tl	1.18	5.00	
206 Pb	1.08	5.00	
207 Pb	1.40	5.00	
208 Pb	0.81	5.00	

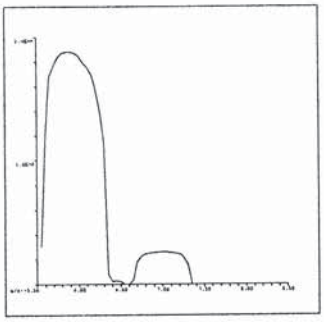
Ion Ratio

Element	Actual	Required	Flag

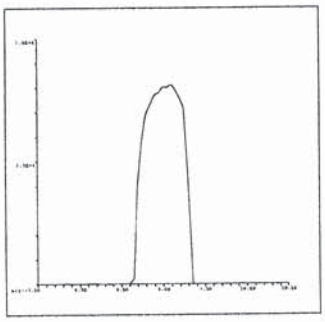
Maximum Bkg. Count(CPS)

Element	Actual	Required	Flag

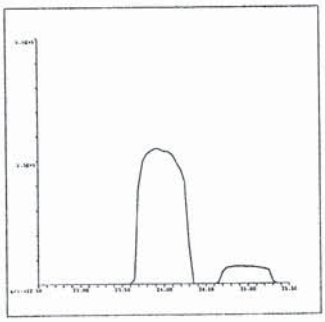
214102205 512



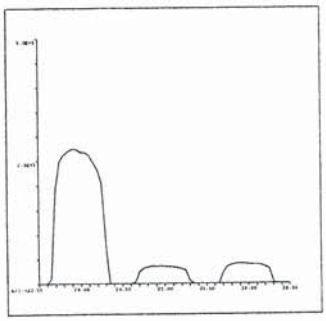
7 Li
Mass Calib.
Actual: 7.00
Required: 6.90-7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.80
Flag:



9 Be
Mass Calib.
Actual: 9.05
Required: 8.90-9.10
Flag:
Peak Width
Actual: 0.60
Required: 0.80
Flag:



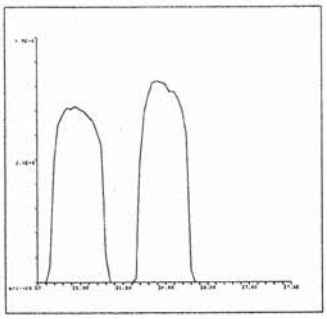
24 Mg
Mass Calib.
Actual: 23.95
Required: 23.90-24.10
Flag:
Peak Width
Actual: 0.60
Required: 0.80
Flag:



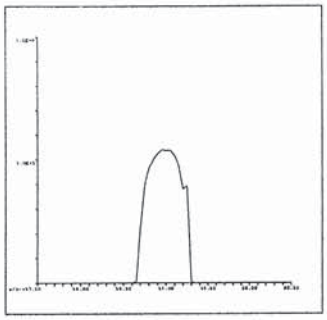
25 Mg
Mass Calib.
Actual: 24.95
Required: 24.90-25.10
Flag:
Peak Width
Actual: 0.65
Required: 0.80
Flag:

214102205 513

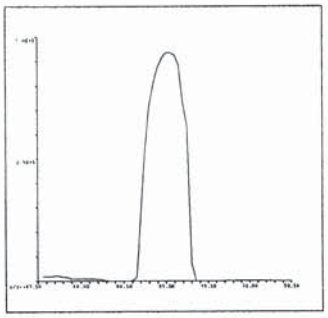
C:\ICPMH\1\DATA\14K03k00.B\QCTUNE00.D



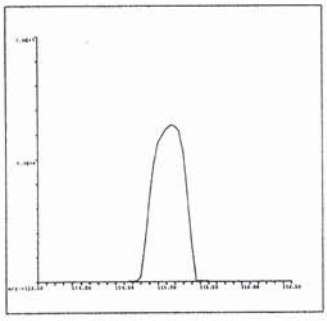
26 Mg
Mass Calib.
Actual: 25.95
Required: 25.90-26.10
Flag:
Peak Width
Actual: 0.60
Required: 0.80
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90-59.10
Flag:
Peak Width
Actual: 0.55
Required: 0.80
Flag:

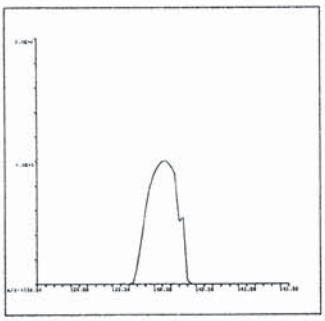


89 Y
Mass Calib.
Actual: 89.05
Required: 88.90-89.10
Flag:
Peak Width
Actual: 0.60
Required: 0.80
Flag:

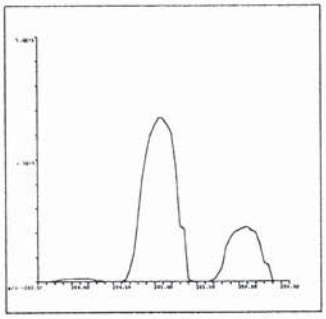


115 In
Mass Calib.
Actual: 115.05
Required: 114.90-115.10
Flag:
Peak Width
Actual: 0.55
Required: 0.80
Flag:

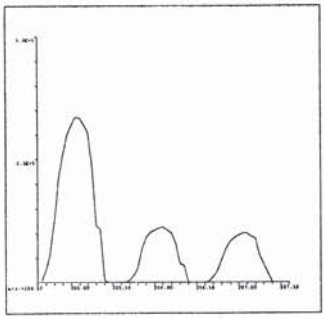
214102205 514



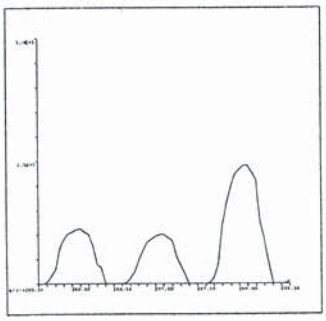
140 Ce
Mass Calib.
Actual: 140.05
Required: 139.90-140.10
Flag:
Peak Width
Actual: 0.55
Required: 0.80
Flag:



205 Tl
Mass Calib.
Actual: 205.00
Required: 204.90-205.10
Flag:
Peak Width
Actual: 0.65
Required: 0.80
Flag:



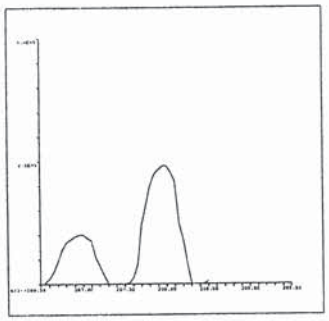
206 Pb
Mass Calib.
Actual: 205.95
Required: 205.90-206.10
Flag:
Peak Width
Actual: 0.60
Required: 0.80
Flag:



207 Pb
Mass Calib.
Actual: 206.95
Required: 206.90-207.10
Flag:
Peak Width
Actual: 0.65
Required: 0.80
Flag:

214102205 515

C:\ICPMH\1\DATA\14K03k00.B\QCTUNE00.D



208 Pb
Mass Calib.
Actual: 207.95
Required: 207.90-208.10
Flag:
Peak Width
Actual: 0.65
Required: 0.80
Flag:

QC Tune Result:Pass

214102205 516

C:\ICPMH\1\DATA\14K03k00.B\QCTUNE00.D

Replicated Data: Tune #1

Mass	Count(CPS)				
6	1278164.00	1283240.00	1278932.00	1296536.00	1293005.00
7	154349.09	156808.00	157780.00	158600.80	159029.30
8	9.00	8.00	11.50	8.00	9.00
9	22673.23	22727.18	22647.04	22869.52	22711.14
24	155075.20	156098.20	156090.70	154307.00	153225.59
25	20099.39	20306.48	20195.18	19968.09	19907.47
26	22333.13	22468.91	22157.51	22027.69	21912.85
59	275329.59	274856.00	276109.59	274515.31	278059.41
88	4665.35	4781.92	4632.34	4544.86	4591.84
89	228843.09	227744.20	231655.80	231769.20	232208.30
90	366.53	345.03	395.05	346.52	340.53
101	48.00	74.00	57.50	63.00	54.00
102	152.01	144.01	133.01	106.51	127.51
103	2672438.00	2646934.00	2674402.00	2683124.00	2715464.00
115	2825880.00	2899356.00	2868388.00	2901570.00	2907540.00
139	36.00	37.50	40.50	37.00	44.50
140	215089.20	220887.41	217673.20	217459.70	220296.91
141	10.50	14.50	16.00	11.50	9.50
204	2895.20	2903.70	2917.71	2972.74	2911.71
205	150499.50	153358.80	154134.70	153452.50	156592.59
206	49576.87	50245.49	50609.40	50365.90	50201.98
207	45472.36	45724.49	46336.87	46518.40	46068.56

11/03/2014 AM 10:12

214102205 517

C:\ICPMH\1\DATA\14K03k00.B\QCTUNE00.D

Mass	Count(CPS)				
208	108635.40	109034.60	108833.30	109126.80	109711.10

214102205 518

Tune Step	Mass	Name	R	a	b (blank)	DL	BEC	Units
2	7	Li	0.999979897	0.000260383	0.002150904	3.815652806	8.260537809	ppb
2	9	Be	0.9999895	0.000278817	5.13299E-06	0.055016248	0.018409904	ppb
2	11	B						ppb
2	23	Na	0.999999194	0.00374498	0.094813171	1.740370851	25.31740163	ppb
2	24	Mg	0.999998883	0.001813591	0.000440479	0.198330831	0.242876674	ppb
2	27	Al	0.999999789	0.000645007	0.000270689	0.180806619	0.419668452	ppb
2	29	Si	0.99999775	2.90314E-05	0.022660244	52.24091303	780.5433128	ppb
2	39	K	0.999998819	0.00153746	0.094579943	4.165721227	61.51701027	ppb
2	44	Ca	0.999999964	8.04353E-05	0.000489417	7.904796467	6.084601288	ppb
2	47	Ti	0.999982183	0.000631537	1.71658E-05	0.141236393	0.027180957	ppb
2	51	V	0.999999957	0.020651314	0.002485807	0.018685559	0.120370386	ppb
2	52	Cr	0.999998646	0.025573941	0.000787674	0.013200877	0.030799866	ppb
2	55	Mn	0.99999775	0.014096118	0.000595315	0.039341599	0.04223258	ppb
2	57	Fe	0.999995309	0.000536962	0.000323806	1.421870359	0.603033401	ppb
2	59	Co	0.999996968	0.04063779	0.000212936	0.011067569	0.005239858	ppb
2	60	Ni	0.9999919	0.010712494	0.000250446	0.012284708	0.023378876	ppb
2	63	Cu	0.999992654	0.029562021	0.001018202	0.019077999	0.034442897	ppb
2	66	Zn	0.999997241	0.004851365	0.001261273	0.092691766	0.259983215	ppb
2	75	As	0.999999761	0.003361425	9.16109E-05	0.007326129	0.027253603	ppb
2	78	Se	0.999999588	0.000300717	0.000119196	0.048322277	0.396373831	ppb
2	88	Sr	0.999999352	0.017357185	0.00139753	0.036790379	0.080515947	ppb
2	90	Zr	0.999893358	0.002152663	1.16301E-05	0.00658866	0.00540264	ppb
2	95	Mo	0.999989676	0.001036944	7.63833E-06	0.013516387	0.007366192	ppb
2	107	Ag	0.999999773	0.007551829	4.69027E-05	0.001880498	0.00621077	ppb
2	111	Cd	0.999997296	0.000461481	2.86083E-06	0.009257469	0.006199232	ppb
2	120	Sn	0.999998749	0.003441752	0.000176493	0.026596062	0.05128005	ppb
2	121	Sb	0.999987126	0.001430459	9.24554E-05	0.03569202	0.064633359	ppb
2	137	Ba	0.999990476	0.000449654	6.82458E-06	0.017519861	0.015177399	ppb
2	156	Gd						ppb
2	205	Tl	0.99998539	0.006892072	0.00010233	0.002193366	0.014847452	ppb
2	208	Pb	0.999999318	0.004825861	7.22145E-05	0.008254583	0.014964076	ppb
2	45	Sc						ppb
2	72	Ge						ppb
2	103	Rh						ppb
2	115	In						ppb
2	159	Tb						ppb
2	175	Lu						ppb
2	209	Bi						ppb

US EPA Tune Check Sample Report

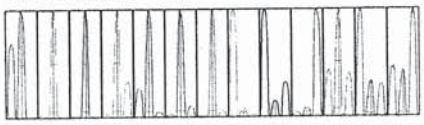
Batch Folder C:\Agilent\ICPMH\1\DATA\2141103A.b
Report Comment
Instrument Name G8403A JP14170244

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
7	3155	0.98	5.00	
89	29805	0.49	5.00	
140	25150	0.65	5.00	
205	12945	0.96	5.00	
59	41695	0.61	5.00	
9	1522	1.39	5.00	
115	32117	1.98	5.00	
24	17560	0.42	5.00	
25	2482	1.03	5.00	
26	5601	0.92	5.00	
208	9323	0.52	5.00	
206	4327	1.09	5.00	
207	3951	1.02	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
7	3172	3124	3151	3199	3130
89	30031	29673	29854	29788	29681
140	25162	25257	25293	25161	24876
205	13045	13075	12941	12897	12766
59	41795	41932	41885	41317	41529
9	1521	1523	1490	1550	1526
115	32760	32484	32099	32148	31096
24	17568	17573	17672	17510	17478
25	2516	2496	2449	2468	2482
26	5649	5631	5525	5629	5571
208	9332	9387	9285	9266	9343
206	4342	4373	4367	4279	4275
207	4010	3959	3950	3899	3938

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
7	513	7.05	6.9 - 7.1		0.782	0.800	
89	5367	89.00	88.9 - 89.1		0.738	0.800	
140	4771	140.05	139.9 - 140.1		0.733	0.800	
205	2390	205.00	204.9 - 205.1		0.754	0.800	
59	7023	58.95	58.9 - 59.1		0.781	0.800	
9	256	9.00	8.9 - 9.1		0.782	0.800	
115	5965	115.00	114.9 - 115.1		0.735	0.800	
24	2876	23.95	23.9 - 24.1		0.777	0.800	
25	410	24.95	24.9 - 25.1		0.784	0.800	
26	911	25.95	25.9 - 26.1		0.748	0.800	
208	1707	208.00	207.9 - 208.1		0.772	0.800	
206	796	206.00	205.9 - 206.1		0.757	0.800	
207	728	207.00	206.9 - 207.1		0.740	0.800	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 344.3 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1550	W	Carrier Gas	0.90	L/min			
RF Matching	1.80	V	Option Gas	0.0	%			
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps			
S/C Temp	2	°C						

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	9.8	V			
Extract 2	-200.0	V	Cell Entrance	-30	V			
Omega Bias	-105	V	Cell Exit	-50	V			
Deflect	14.4	V						

Cell Parameters

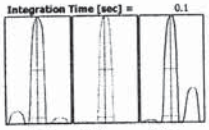
ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	false		3rd Gas Flow	0	%			
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	170	V			
Energy Discrimination	3.0	V						

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
59	10692	1.55	5.00	
89	3664	2.07	5.00	
205	8848	1.01	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	10549	10707	10517	10762	10924
89	3545	3653	3672	3749	3703
205	8918	8918	8852	8700	8851

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	W-X% (Flag)
59	1814	59.000	58.9 - 59.1		0.776	0.800	
89	650	89.000	88.9 - 89.1		0.731	0.800	
205	1605	205.000	204.9 - 205.1		0.753	0.800	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 112.7 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1550	W	Carrier Gas	0.90	L/min			
RF Matching	1.80	V	Option Gas	0.0	%			
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps			
S/C Temp	2	°C						

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.7	V			
Extract 2	-200.0	V	Cell Entrance	-40	V			
Omega Bias	-100	V	Cell Exit	-60	V			
Deflect	2.8	V						

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	true		3rd Gas Flow	0	%			
He Flow	4.3	mL/min	OctP Bias	-18.0	V			
H2 Flow	0.0	mL/min	OctP RF	200	V			
Energy Discrimination	4.0	V						

2141102205 529

Tune Step	Mass	Name	R	a	b (blank)	DL	BEC	Units
1	7	Li	0.999972111	0.0008827	0.007707201	0.287479963	8.731396715	ppb
1	9	Be	0.999991525	0.000513981	1.04E-07	0.001054486	0.000202936	ppb
1	11	B	0.999994221	0.000405552	8.08E-05	0.016430362	0.199223667	ppb
2	23	Na	0.999995795	0.003656135	0.089372234	1.033732929	24.44445604	ppb
2	24	Mg	0.999993894	0.001867986	0.001131489	0.167072825	0.605726876	ppb
2	27	Al	0.99999492	0.000694031	0.00060702	0.426497092	0.874629806	ppb
2	29	Si	0.999960527	2.33E-05	0.063087253	147.7841777	2707.526964	ppb
2	39	K	0.999999964	0.001654596	0.211957791	10.59575137	128.1024276	ppb
2	44	Ca	0.999999298	8.21E-05	0.00199877	3.308602567	24.33524146	ppb
2	47	Ti	0.999997761	0.000653496	5.60E-05	0.112783063	0.085768103	ppb
2	51	V	0.999999676	0.030588094	0.002533322	0.017257812	0.082820528	ppb
2	52	Cr	0.999997816	0.03722007	0.010716691	0.056094164	0.287927752	ppb
2	55	Mn	0.999999279	0.018540188	0.001735132	0.033003497	0.093587608	ppb
2	57	Fe	0.999997788	0.000736122	0.000939436	1.269705111	1.276195444	ppb
2	59	Co	0.999991026	0.065631492	0.000337107	0.003152128	0.005136356	ppb
2	60	Ni	0.99999621	0.018352908	0.000810553	0.019092989	0.044164822	ppb
2	63	Cu	0.999990788	0.05061332	0.003821926	0.014640944	0.075512259	ppb
2	66	Zn	0.999999704	0.008414039	0.012847029	1.133652309	1.526856358	ppb
2	75	As	0.999999556	0.007584838	0.000220717	0.022755733	0.029099794	ppb
2	78	Se	0.999987127	0.000366458	0.000144293	0.040640692	0.393750766	ppb
1	88	Sr	0.999983751	0.036223927	0.000512513	0.007380872	0.014148457	ppb
1	90	Zr	0.99999621	0.022894137	0.000168051	0.001791544	0.007340355	ppb
1	95	Mo	0.999999934	0.001306936	2.31E-06	6.00E-05	0.001769721	ppb
1	107	Ag	0.999999201	0.003548792	8.35E-06	0.000969538	0.002354297	ppb
1	111	Cd	0.999999953	0.000729862	1.93E-06	8.96E-05	0.002641336	ppb
1	118	(Sn)	0.999999859	0.001993069	4.15E-05	0.003571936	0.020831439	ppb
2	118	(Sn)	0.999997843	0.002601446	6.84E-05	0.026863108	0.026301398	ppb
2	120	Sn	0.999997958	0.003718017	0.000110711	0.024653974	0.029776959	ppb
1	121	Sb	0.999996184	0.00319964	0.00010216	0.001370882	0.031928719	ppb
1	137	Ba	0.999999071	0.001011325	1.26E-05	0.007051251	0.012467645	ppb
2	156	[Se]						ppb
1	205	Tl	0.999999933	0.006700993	5.14E-06	0.00133752	0.000766372	ppb
1	206	(Pb)	0.999998436	0.002181426	4.98E-05	0.008297003	0.022827637	ppb
1	207	(Pb)	0.999999766	0.001973786	3.78E-05	0.014596458	0.019144353	ppb
1	208	Pb	0.999999973	0.008886939	0.000164418	0.006576206	0.018501087	ppb
1	6	(Li)						
1	45	Sc						
2	45	Sc						
1	72	Ge						
2	72	Ge						
1	103	Rh						
2	103	Rh						
1	115	In						
2	115	In						
1	159	Tb						
2	159	Tb						
1	175	Lu						
2	175	Lu						
1	209	Bi						
2	209	Bi						

US EPA Tune Check Sample Report

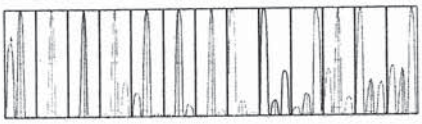
Batch Folder C:\Agilent\ICPMH\1\DATA\2141105B.b
Report Comment
Instrument Name G8403A JP14170244

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
7	2227	2.38	5.00	
89	32467	0.50	5.00	
140	28172	0.48	5.00	
205	15856	0.76	5.00	
59	44104	0.36	5.00	
9	1253	2.12	5.00	
115	30130	0.74	5.00	
24	19207	0.64	5.00	
25	2640	1.74	5.00	
26	7935	0.66	5.00	
208	11321	0.66	5.00	
206	5182	1.24	5.00	
207	4773	1.21	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
7	2251	2219	2185	2305	2175
89	32539	32709	32394	32405	32290
140	28329	28119	28020	28092	28301
205	15717	15861	15982	15755	15967
59	44325	44109	43991	44177	43917
9	1260	1266	1286	1217	1239
115	30184	30196	29853	29981	30435
24	19227	19375	19029	19191	19214
25	2645	2709	2624	2639	2582
26	7955	7875	7973	7989	7884
208	11321	11200	11358	11323	11403
206	5140	5182	5278	5202	5111
207	4766	4783	4865	4713	4739

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
7	367	7.00	6.9 - 7.1		0.783	0.800	
89	5814	89.00	88.9 - 89.1		0.764	0.800	
140	5253	140.05	139.9 - 140.1		0.747	0.800	
205	2880	205.00	204.9 - 205.1		0.803	0.800	
59	7267	58.95	58.9 - 59.1		0.785	0.800	
9	197	8.90	8.9 - 9.1		0.782	0.800	
115	5467	115.05	114.9 - 115.1		0.755	0.800	
24	3029	23.90	23.9 - 24.1		0.789	0.800	
25	433	24.95	24.9 - 25.1		0.786	0.800	
26	1259	25.95	25.9 - 26.1		0.790	0.800	
208	2037	208.00	207.9 - 208.1		0.779	0.800	
206	943	206.00	205.9 - 206.1		0.753	0.800	
207	872	207.00	206.9 - 207.1		0.741	0.800	

~~FF~~ passed 6020A
AWG 11-6-14

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 344.3 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1550	W	Carrier Gas	0.90	L/min			
RF Matching	1.80	V	Option Gas	0.0	%			
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps			
S/C Temp	2	°C						

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	8.9	V			
Extract 2	-200.0	V	Cell Entrance	-30	V			
Omega Bias	-100	V	Cell Exit	-50	V			
Defect	14.8	V						

Cell Parameters

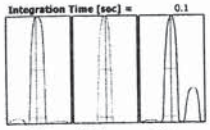
ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	false		3rd Gas Flow	0	%			
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	200	V			
Energy Discrimination	3.0	V						

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
59	10145	1.43	5.00	
89	3675	2.54	5.00	
205	10139	0.81	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	9949	10089	10112	10311	10262
89	3548	3642	3779	3651	3753
205	10107	10116	10040	10175	10258

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	W-X% (Flag)
59	1689	58.950	58.9 - 59.1		0.779	0.800	
89	651	89.050	88.9 - 89.1		0.735	0.800	
205	1833	205.000	204.9 - 205.1		0.740	0.800	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 112.7 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1550	W	Carrier Gas	0.90	L/min			
RF Matching	1.80	V	Option Gas	0.0	%			
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps			
S/C Temp	2	°C						

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.7	V			
Extract 2	-200.0	V	Cell Entrance	-40	V			
Omega Bias	-100	V	Cell Exit	-60	V			
Defect	2.8	V						

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	true		3rd Gas Flow	0	%			
He Flow	4.3	mL/min	OctP Bias	-18.0	V			
H2 Flow	0.0	mL/min	OctP RF	200	V			
Energy Discrimination	4.0	V						

2141102205 522

Tune Step	Mass	Name	R	a	b (blank)	DL	BEC	Units
1	7	Li	0.999998086	0.000887916	0.007836625	0.355096082	8.825861075	ppb
1	9	Be	0.999999683	0.000557849	1.52E-06	0.005915899	0.002723716	ppb
1	11	B	0.999999806	0.00043608	0.000356016	0.050482076	0.816401514	ppb
2	23	Na	0.999999814	0.003760338	0.064246273	0.739364458	17.08524012	ppb
2	24	Mg	0.999999999	0.001920923	0.001921822	0.353682891	1.000468286	ppb
2	27	Al	0.999999805	0.00069401	0.000503236	0.134989438	0.72511327	ppb
2	29	Si	0.99999964	2.24E-05	0.01858813	16.6869479	831.48948	ppb
2	39	K	0.999997759	0.001664161	0.21322636	12.56403788	128.1284451	ppb
2	44	Ca	0.999999862	8.27E-05	0.004640916	14.09407912	56.12930049	ppb
2	47	Ti	0.999997688	0.000647309	5.65E-05	0.069988648	0.087219	ppb
2	51	V	0.999995555	0.030191706	0.006294377	0.038004776	0.208480333	ppb
2	52	Cr	0.999999359	0.037049806	0.005465296	0.015562199	0.147512144	ppb
2	55	Mn	0.999988454	0.018544921	0.003754186	0.03643363	0.202437404	ppb
2	57	Fe	0.999999871	0.000729308	0.000636079	0.431347746	0.872166973	ppb
2	59	Co	0.999999897	0.064376181	0.000482531	0.004280326	0.007495487	ppb
2	60	Ni	0.999999787	0.018118233	0.000608557	0.029744962	0.033588076	ppb
2	63	Cu	0.999999317	0.039911812	0.002188781	0.002721334	0.054840435	ppb
2	66	Zn	0.999997808	0.008247573	0.007443219	0.046488878	0.902473882	ppb
2	75	As	0.99999719	0.007368035	0.000319985	0.032110304	0.043428822	ppb
2	78	Se	0.999945307	0.000350546	0.000103529	0.054310722	0.295336543	ppb
1	88	Sr	0.99999985	0.038161977	0.00098029	0.003728456	0.025687602	ppb
1	90	Zr	0.999997091	0.02378438	0.000266323	0.005414928	0.011197378	ppb
1	95	Mo	0.999988621	0.001291087	3.75E-06	7.11E-05	0.002906573	ppb
1	107	Ag	0.999997025	0.00342403	1.89E-05	0.003350622	0.005520043	ppb
1	111	Cd	0.999994703	0.000719624	8.80E-07	0.003660812	0.001223126	ppb
1	118	(Sn)	0.999993446	0.002028656	0.000194785	0.001313539	0.096016882	ppb
2	118	(Sn)	0.999991724	0.002591445	0.000302219	0.098662368	0.116621754	ppb
2	120	Sn	0.99999535	0.003739759	0.000375677	0.017140094	0.100454933	ppb
1	121	Sb	0.999997158	0.00328326	0.000104339	0.0020907	0.031779064	ppb
1	137	Ba	0.999993369	0.001055937	1.46E-05	0.009018187	0.013845782	ppb
2	156	[Se]						ppb
1	205	Tl	0.999997248	0.006742704	9.06E-06	0.002855865	0.001343639	ppb
1	206	(Pb)	0.999999413	0.002229196	2.22E-05	0.006056535	0.009938065	ppb
1	207	(Pb)	0.999999463	0.001999525	1.87E-05	0.010124548	0.009363773	ppb
1	208	Pb	0.999997445	0.009071043	8.06E-05	0.006332707	0.008887664	ppb
1	6	(Li)						ppb
1	45	Sc						ppb
2	45	Sc						ppb
1	72	Ge						ppb
2	72	Ge						ppb
1	103	Rh						ppb
2	103	Rh						ppb
1	115	In						ppb
2	115	In						ppb
1	159	Tb						ppb
2	159	Tb						ppb
1	175	Lu						ppb
2	175	Lu						ppb
1	209	Bi						ppb
2	209	Bi						ppb

US EPA Tune Check Sample Report

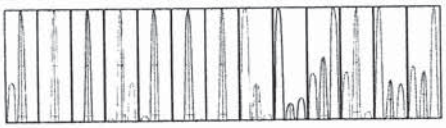
Batch Folder C:\Agilent\ICPMH\1\DATA\2141023A.b
Report Comment
Instrument Name G8403A JP14170244

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
7	2235	1.12	5.00	
89	44541	0.59	5.00	
140	36017	0.45	5.00	
206	18143	0.52	5.00	
59	63700	0.88	5.00	
9	2075	3.00	5.00	
115	39141	0.48	5.00	
24	22654	0.94	5.00	
25	3196	1.77	5.00	
26	4285	2.26	5.00	
208	13366	0.90	5.00	
206	6219	1.16	5.00	
207	5638	1.15	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
7	2234	2236	2239	2197	2267
89	44479	44663	44884	44170	44512
140	36189	36019	36139	35962	35779
205	18240	18101	18235	18115	18021
59	64168	63665	64351	63253	63062
9	1979	2080	2067	2099	2150
115	39170	39177	39398	38914	39048
24	22907	22739	22610	22326	22687
25	3263	3252	3170	3152	3145
26	4420	4318	4273	4261	4154
208	13404	13193	13294	13463	13475
206	6281	6104	6274	6241	6197
207	5574	5577	5722	5634	5684

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
7	376	7.00	6.9 - 7.1		0.780	0.800	
89	8153	89.00	88.9 - 89.1		0.727	0.800	
140	7058	140.00	139.9 - 140.1		0.722	0.800	
205	3528	205.00	204.9 - 205.1		0.742	0.800	
59	10924	59.00	58.9 - 59.1		0.767	0.800	
9	338	9.00	8.9 - 9.1		0.783	0.800	
115	7497	115.00	114.9 - 115.1		0.722	0.800	
24	3661	24.00	23.9 - 24.1		0.790	0.800	
25	508	24.95	24.9 - 25.1		0.785	0.800	
26	695	26.00	25.9 - 26.1		0.786	0.800	
208	2602	207.95	207.9 - 208.1		0.748	0.800	
206	1201	205.95	205.9 - 206.1		0.721	0.800	
207	1089	206.95	206.9 - 207.1		0.697	0.800	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 344.3 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Plasma Mode	HMI		Aerosol Dilution	HMI-8				

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 2	-250.0	V	Omega Lens	7.6	V			
Omega Bias	-120	V	Deflect	14.4	V			

Cell Parameters

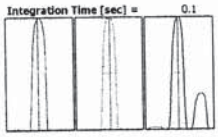
ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	false		H2 Flow	0.0	mL/min			
He Flow	0.0	mL/min	3rd Gas Flow	0	%			
OctP RF	200	V						

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
59	184806	1.53	5.00	
89	55130	2.07	5.00	
205	317633	0.70	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	180076	184348	186449	186182	186974
89	53278	54958	55335	55871	56207
205	315364	316243	316618	319416	320525

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	W-X% (Flag)
59	31869	59.000	58.9 - 59.1		0.736	0.800	
89	10043	89.050	88.9 - 89.1		0.713	0.800	
205	62310	205.000	204.9 - 205.1		0.725	0.800	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 112.7 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit
Plasma Mode	General Purpose	

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 2	-250.0	V	Omega Lens	7.6	V			
Omega Bias	-120	V	Deflect	2.4	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	true		H2 Flow	0.0	mL/min			
He Flow	4.3	mL/min	3rd Gas Flow	0	%			
OctP RF	200	V						

214102295 524

Tune Step	Mass	Name	R	a	b (blank)	DL	BEC	Units
1	7	Li	0.999988945	0.00045293	0.004171865	3.536079607	9.210845041	ppb
1	9	Be	0.999971481	0.00047177	3.99E-06	0.010121703	0.008457392	ppb
1	11	B	0.999948426	0.000453472	0.000246643	0.219013242	0.543898767	ppb
2	23	Na	0.99999734	0.004209732	0.019601089	0.504053147	4.656136625	ppb
2	24	Mg	0.99999717	0.002170514	0.001332502	0.283351518	0.613910931	ppb
2	27	Al	0.999998524	0.000724587	0.000586485	0.657404285	0.809406626	ppb
2	29	Si	0.99997901	2.13E-05	0.00252563	32.89226693	118.6284972	ppb
2	39	K	0.999996111	0.001406243	0.063015693	3.67244933	44.81136696	ppb
2	44	Ca	0.999998679	7.92E-05	0.002531714	4.793694297	31.97343005	ppb
2	47	Ti	0.999997692	0.000654474	3.33E-05	0.033672199	0.050922875	ppb
2	51	V	0.999999928	0.02672039	0.000667002	0.005834864	0.024962278	ppb
2	52	Cr	0.999997974	0.034416919	0.001859601	0.009579306	0.054031601	ppb
2	55	Mn	0.999994984	0.015318364	0.000775629	0.035403798	0.050633953	ppb
2	57	Fe	0.999999221	0.00068554	0.000315991	0.198285697	0.460937663	ppb
2	59	Co	0.999996921	0.066948315	0.000133615	0.002170043	0.001995786	ppb
2	60	Ni	0.999989575	0.01913873	0.002022203	0.009826909	0.105660253	ppb
2	63	Cu	0.999991777	0.06666855	0.001253218	0.003721119	0.018797738	ppb
2	66	Zn	0.999997817	0.008013769	0.005574081	0.116717024	0.695563023	ppb
2	75	As	0.999999796	0.005249842	8.03E-05	0.004171025	0.015304129	ppb
2	78	Se	0.999999558	0.000224023	4.55E-05	0.059548519	0.203000815	ppb
1	88	Sr	0.999983006	0.009174823	0.000218361	0.011006691	0.023800062	ppb
1	90	Zr	0.999999608	0.003580438	5.34E-05	0.003005165	0.014912919	ppb
1	95	Mo	0.999925959	0.001196226	1.28E-05	0.010940317	0.010684554	ppb
1	107	Ag	0.999971527	0.003120151	2.55E-05	0.010958669	0.008186279	ppb
1	111	Cd	0.999948237	0.000673668	8.49E-06	0.006207075	0.012596759	ppb
1	118	(Sn)	0.999950192	0.001815223	5.96E-05	0.031124164	0.032845597	ppb
2	118	(Sn)	0.999999954	0.021364133	0.000658045	0.008014734	0.03080138	ppb
2	120	Sn	0.999998964	0.003839599	0.000149072	0.016965147	0.038824836	ppb
1	121	Sb	0.999899129	0.003284719	0.000118727	0.025230045	0.036145361	ppb
1	137	Ba	0.999968556	0.000978998	2.60E-05	0.034254941	0.026562276	ppb
2	156	Gd						ppb
1	205	Tl	0.999982371	0.006124531	0.000129828	0.028601947	0.021197977	ppb
1	206	(Pb)	0.999986338	0.002076383	0.000289732	0.066110987	0.139536829	ppb
1	207	(Pb)	0.999974643	0.001882091	0.000239665	0.102470234	0.127339923	ppb
1	208	Pb	0.999979814	0.008388115	0.001048936	0.076059482	0.125050325	ppb
1	6	Li						ppb
1	45	Sc						ppb
2	45	Sc						ppb
1	72	Ge						ppb
2	72	Ge						ppb
1	103	Rh						ppb
2	103	Rh						ppb
1	115	In						ppb
2	115	In						ppb
1	159	Tb						ppb
2	159	Tb						ppb
1	175	Lu						ppb
2	175	Lu						ppb
1	209	Bi						ppb
2	209	Bi						ppb

US EPA Tune Check Sample Report

Batch Folder C:\Agilent\ICPMH\1\DATA\21411048.b
Report Comment
Instrument Name G8403A JP14170244

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
7	9918	2.08	5.00	
89	113980	0.87	5.00	
140	102778	1.36	5.00	
205	62493	0.92	5.00	
59	139127	1.15	5.00	
9	5030	1.53	5.00	
115	107398	3.37	5.00	
24	44958	1.60	5.00	
25	6390	1.74	5.00	
26	8616	1.42	5.00	
208	44313	1.40	5.00	
206	20762	0.90	5.00	
207	18924	1.08	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
7	10088	10069	9951	9576	9905
89	114575	114198	115126	112638	113362
140	103815	102359	104284	100709	102724
205	62726	62625	63220	61700	62195
59	140415	140875	139240	137007	138097
9	5158	4998	4996	4960	5039
115	112749	108681	107118	103279	105164
24	45771	45434	44809	43886	44890
25	6578	6349	6383	6285	6355
26	8807	8662	8511	8521	8580
208	44620	44949	44679	43519	43795
206	20999	20654	20851	20491	20864
207	19286	18827	18831	18797	18878

Integration Time [sec] = 0.1

Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
7	1609	7.00	6.9 - 7.1		0.783	0.800	
89	20151	89.00	88.9 - 89.1		0.769	0.800	
140	19524	140.05	139.9 - 140.1		0.756	0.800	
205	11386	205.00	204.9 - 205.1		0.778	0.800	
59	23166	58.95	58.9 - 59.1		0.783	0.800	
9	821	9.00	8.9 - 9.1		0.784	0.800	
115	19905	115.00	114.9 - 115.1		0.757	0.800	
24	7347	23.95	23.9 - 24.1		0.787	0.800	
25	1036	24.95	24.9 - 25.1		0.787	0.800	
26	1390	25.95	25.9 - 26.1		0.772	0.800	
208	8077	207.95	207.9 - 208.1		0.776	0.800	
206	3747	206.00	205.9 - 206.1		0.776	0.800	
207	3350	207.00	206.9 - 207.1		0.737	0.800	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 344.3 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit
RF Power	1550	W
RF Matching	1.80	V
Smpl Depth	8.0	mm
S/C Temp	2	°C

ParameterName	Value	Unit
Carrier Gas	0.90	L/min
Option Gas	0.0	%
Nebulizer Pump	0.10	rps

ParameterName	Value	Unit
-		

Lenses Parameters

ParameterName	Value	Unit
Extract 1	0.0	V
Extract 2	-200.0	V
Omega Bias	-95	V
Deflect	14.8	V

ParameterName	Value	Unit
Omega Lens	8.3	V
Cell Entrance	-30	V
Cell Exit	-50	V

ParameterName	Value	Unit

Cell Parameters

ParameterName	Value	Unit
Use Gas	false	
He Flow	0.0	mL/min
H2 Flow	0.0	mL/min
Energy Discrimination	3.0	V

ParameterName	Value	Unit
3rd Gas Flow	0	%
OctP Bias	-8.0	V
OctP RF	180	V

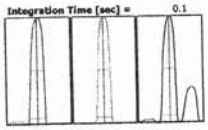
ParameterName	Value	Unit

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
59	35185	1.35	5.00	
89	13839	2.06	5.00	
205	42646	2.36	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	35117	35173	35609	35591	34437
89	13667	13595	14214	14078	13641
205	43362	42309	43689	42752	41118

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	W-X% (Flag)
59	5943	59.000	58.9 - 59.1		0.779	0.800	
89	2474	89.000	88.9 - 89.1		0.737	0.800	
205	7766	205.000	204.9 - 205.1		0.768	0.800	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 112.7 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit
RF Power	1550	W
RF Matching	1.80	V
Smpl Depth	8.0	mm
S/C Temp	2	°C

ParameterName	Value	Unit
Carrier Gas	0.90	L/min
Option Gas	0.0	%
Nebulizer Pump	0.10	rps

ParameterName	Value	Unit

Lenses Parameters

ParameterName	Value	Unit
Extract 1	0.0	V
Extract 2	-200.0	V
Omega Bias	-100	V
Deflect	2.8	V

ParameterName	Value	Unit
Omega Lens	7.7	V
Cell Entrance	-40	V
Cell Exit	-60	V

ParameterName	Value	Unit

Cell Parameters

ParameterName	Value	Unit
Use Gas	true	
He Flow	4.3	mL/min
H2 Flow	0.0	mL/min
Energy Discrimination	4.0	V

ParameterName	Value	Unit
3rd Gas Flow	0	%
OctP Bias	-18.0	V
OctP RF	200	V

ParameterName	Value	Unit

214102295 526

Tune Step	Mass	Name	R	a	b (blank)	DL	BEC	Units
1	7	Li	0.999968432	0.000834915	0.007239445	0.42816818	8.670878688	ppb
1	9	Be	0.999983274	0.000541212	2.60E-06	0.004843328	0.004798422	ppb
1	11	B	0.999993605	0.000457411	0.000103222	0.074895437	0.225666379	ppb
2	23	Na	0.999996215	0.003556244	0.076514898	1.238689074	21.51565212	ppb
2	24	Mg	0.999997185	0.001850349	0.001741648	0.29086619	0.941253652	ppb
2	27	Al	0.999998379	0.000699841	0.000541602	0.357324768	0.773892112	ppb
2	29	Si	0.999994205	2.33E-05	0.017895873	93.29046955	767.8634072	ppb
2	39	K	0.999999769	0.001640666	0.234392263	4.171836496	142.8641152	ppb
2	44	Ca	0.999999244	8.32E-05	0.001293398	1.82755191	15.53998785	ppb
2	47	Ti	0.999998383	0.000651598	4.91E-05	0.071726787	0.075421561	ppb
2	51	V	0.999999724	0.028930682	0.001294959	0.012937383	0.044760754	ppb
2	52	Cr	0.999999613	0.034875675	0.007077358	0.039076539	0.202931066	ppb
2	55	Mn	0.999999846	0.017897982	0.0017592	0.02283678	0.098290419	ppb
2	57	Fe	0.999995766	0.000695779	0.001134093	1.195386142	1.629961582	ppb
2	59	Co	0.999994099	0.061581835	0.000704657	0.003539365	0.011442607	ppb
2	60	Ni	0.999991226	0.017130613	0.001559053	0.021857282	0.091009738	ppb
2	63	Cu	0.999993842	0.039536745	0.002055666	0.011583846	0.051993803	ppb
2	66	Zn	0.999998249	0.008093919	0.003111919	0.073061579	0.384476188	ppb
2	75	As	0.999999643	0.00759077	0.00021493	0.029038749	0.028314639	ppb
2	78	Se	0.999980108	0.000364326	0.000193677	0.038557204	0.531602853	ppb
1	88	Sr	0.999993499	0.036327497	0.000428595	0.004594173	0.011798092	ppb
1	90	Zr	0.999998449	0.022597523	0.000194762	0.004778531	0.00861875	ppb
1	95	Mo	0.999999999	0.001271128	4.56E-06	0.000522168	0.003586525	ppb
1	107	Ag	0.999999048	0.003472219	1.25E-05	0.00208194	0.003590225	ppb
1	111	Cd	0.999999605	0.000728995	1.47E-06	0.005792681	0.002016294	ppb
1	118	(Sn)	0.999999361	0.001994263	5.38E-05	0.01634425	0.02697197	ppb
2	118	(Sn)	0.999995902	0.002612113	8.61E-05	0.01783606	0.032948635	ppb
2	120	Sn	0.999999456	0.003742421	0.000128833	0.018027807	0.034424921	ppb
1	121	Sb	0.99999509	0.003242216	0.000106628	0.006074163	0.032887484	ppb
1	137	Ba	0.999999933	0.001018445	1.69E-05	0.011083513	0.016577356	ppb
2	156	[Se]						ppb
1	205	Tl	0.999997884	0.006473746	8.22E-06	0.001361364	0.001270505	ppb
1	206	(Pb)	0.999995814	0.002141745	2.34E-05	0.008730875	0.010931754	ppb
1	207	(Pb)	0.99999239	0.001920333	2.78E-05	0.001506402	0.014485509	ppb
1	208	Pb	0.999998642	0.008719508	0.00012216	0.007508258	0.014009961	ppb
1	6	(Li)						ppb
1	45	Sc						ppb
2	45	Sc						ppb
1	72	Ge						ppb
2	72	Ge						ppb
1	103	Rh						ppb
2	103	Rh						ppb
1	115	In						ppb
2	115	In						ppb
1	159	Tb						ppb
2	159	Tb						ppb
1	175	Lu						ppb
2	175	Lu						ppb
1	209	Bi						ppb
2	209	Bi						ppb

ICP SAMPLE PREPARATION FORM

EXTRACTION DATE/TIME:	Start: 10:00 End: 17:00	BATCH NO:	543566
MATRIX:	WATER ☑ SOIL ☐ TCLP EXT ☐ ORGANIC ☐	METHOD:	200.0 ☐ 200.7 ☐ 3010A ☑ 3050B ☐ 3051 ☐

	CLIENT	CLIENT ID	GCAL ID	INITIAL VOL/WT mL g	FINAL VOLUME (mL)	SAMPLE TYPE	COMMENTS	REAGENTS/ STANDARDS
1	QC ACCOUNT	MB for HBN 543566 [DIGM/37319]	1372874	50	50	MB		HNO3 Ultra 1772H
2	QC ACCOUNT	LCS for HBN 543566 [DIGM/37319	1372875			LCS		
3	4589	LEACHATE	21410226401			SAMPLE		HCL Ultra 1772B
4	4589	LEAK DETECT	21410226402			SAMPLE		
5	4589	RN-06	21410226501			SAMPLE		H2O2 NA
6	4589	RN-06 MS	21410226505			MS		
7	4589	RN-06 MSD	21410226506			MSD		SOLID MATERIAL NA
8	4589	RN-07	21410226507			SAMPLE		
9	4589	BD-02	21410226511			FLDDUP		
10	4589	EB-02	21410226515			EQBK		
11	4747	MA01MW002	21410220501			SAMPLE		
12	4747	MA01MW001	21410220503			SAMPLE		
13	4747	MA01MW004	21410220504			SAMPLE		
14	4747	MA01MW004-a	21410220505			FLDDUP		
15	4747	MA01MW003	21410220507			SAMPLE		
16	4804	GEWC-1	21410220801	↓	↓	SAMPLE		
17								SPIKING SOLUTIONS (LCS/MS)
18								
19								GCALI-1 - 250uL NA
20								
21								GCALI-2 - 250uL NA
22								
23								ORGANOMETALLIC ICP SPIKE 0.025g NA
24								
25								
26								
27								
28								

COMMENTS:

BALANCE ID: NA TEMP: RT

BLOCK ID	TECHNICIAN	DATE
A1 140803	JEC	10-31-14
REPIPET BOTTLES VERIFIED	**REVIEW**	**DATE**
N/A	AWG	10/23/14

ICP SAMPLE PREPARATION FORM

EXTRACTION DATE/TIME:	Start: 11:30 End: 00:30	BATCH NO:	543616
MATRIX:	WATER ☑ SOIL ☐ TCLP EXT ☐ ORGANIC ☐	METHOD:	200.0 ☐ 200.7 ☐ 3010A ☑ 3050B ☐ 3051 ☐

	CLIENT	CLIENT ID	GCAL ID	INITIAL VOL/WT mL g	FINAL VOLUME (mL)	SAMPLE TYPE	COMMENTS	REAGENTS/ STANDARDS
1	QC ACCOUNT	MB for HBN 543616 [DIGM/37322]	1373150	20	20	MB		HNO3 ULTRA 712324
2	QC ACCOUNT	LCS for HBN 543616 [DIGM/37322	1373151			LCS		
3	4271	OXY #1	21410230601			SAMPLE		HCL ULTRA 712018
4	4271	OXY #2	21410230602			SAMPLE		
5	4747	M114MW002	21410220509			SAMPLE		H2O2 NA
6	4747	M114MW003	21410220511			SAMPLE		
7	4747	M114MW004	21410220512			SAMPLE		SOLID MATERIAL: NA
8	4747	M114MW001	21410220514			SAMPLE		
9	4391	MW-6	21410231401			SAMPLE		ICPMS SPIC 200.7 712393
10	QC ACCOUNT	MW-6(1373141MS)	1373152			MS		
11	QC ACCOUNT	MW-6(1373141MSD)	1373153			MSD		ICPMS FAST SPIC 200.7 712387-2
12	4391	MW-7	21410231402			SAMPLE		
13	4391	MW-2A	21410231403			SAMPLE		ICPMS SPIC 200.7 712387-1
14	4391	MW-1A	21410231404			SAMPLE		
15	4391	MW-3	21410231405			SAMPLE		ICPMS SPIC 200.7 712310
16	4391	MW-4B	21410231406			SAMPLE		
17	4391	DUPLICATE	21410231408			FLDDUP		SPIKING SOLUTIONS (LCS/MS)
18	0176	Aluminous Water (T-24)	21410232801			SAMPLE		
19								GCALI-1 - 250uL NA
20								
21								GCALI-2 - 250uL NA
22								
23								ORGANOMETALLIC ICP SPIKE 0.025g NA
24								
25								
26								
27								
28								

COMMENTS:

BALANCE ID: NA TEMP: 93°

BLOCK ID	TECHNICIAN	DATE
D1 AQ803	JL	10-23-14
REPIPET BOTTLES VERIFIED	REVIEW	DATE
N/A	AWG	10/27/14

Revision 1 08/10/2010

ICP SAMPLE PREPARATION FORM

EXTRACTION DATE/TIME:	Start: 8:00 End: 10:00	BATCH NO:	543697
MATRIX:	WATER ☑ SOIL ☐ TCLP EXT ☐ ORGANIC ☐	METHOD:	200.0 ☐ 200.7 ☐ 3010A ☑ 3050B ☐ 3051 ☐ 6020

	CLIENT	CLIENT ID	GCAL ID	INITIAL VOL/WT (mL) g	FINAL VOLUME (mL)	SAMPLE TYPE	COMMENTS	REAGENTS/ STANDARDS
1	QC ACCOUNT	MB for HBN 543697 [DIGM/37335]	1373519	50	50	MB		HNO3 Lot# 2172214
2	QC ACCOUNT	LCS for HBN 543697 [DIGM/37335	1373520			LCS		
3	4747	MWQ-24	21410220515			SAMPLE		HCL Lot# 2172015
4	4747	MWQ-24-ms	21410220516			MS		
5	4747	MWQ-24-sd	21410220517			MSD		H2O2 NA
6	4747	MAO2MW001D	21410220520			SAMPLE		
7	4390	MW-29 (SPLP)	21410215801			SAMPLE		SOLID MATERIAL: NA
8	4849	91225	21410241901			SAMPLE		
9	2620	P12(1)-B	21410242201			SAMPLE		
10	2620	P12(1)-M	21410242202			SAMPLE		
11	2620	P12(1)-T	21410242203			SAMPLE		
12	2620	P12(2)-B	21410242204			SAMPLE		
13	2620	P12(2)-M	21410242205			SAMPLE		
14	2620	P12(2)-T	21410242206			SAMPLE		
15	2620	P12(3)-B	21410242207			SAMPLE		
16	2620	P12(3)-M	21410242208			SAMPLE		
17	2620	P12(3)-T	21410242209			SAMPLE		SPIKING SOLUTIONS (LCS/MS)
18	2620	P13(1)-B	21410242501			SAMPLE		
19	2620	P13(1)-M	21410242502			SAMPLE		GCALI-1 - 250uL NA
20	2620	P13(1)-T	21410242503	↓	↓	SAMPLE		
21								GCALI-2 - 250uL NA
22								
23								ORGANOMETALLIC ICP SPIKE 0.025g NA
24								
25								
26								
27								
28								

COMMENTS:

BALANCE ID: NA TEMP: 93°

BLOCK ID	TECHNICIAN	DATE
B1 KL802	JSA	10-24-14
REPIPET BOTTLES VERIFIED	REVIEW	DATE
N/A	AWG	10/27/14

Revision 1, 08/10/2010

ICP SAMPLE PREPARATION FORM

EXTRACTION DATE/TIME:	Start: 16:20 End: 16:30	BATCH NO:	543538
MATRIX:	WATER ☑ SOIL ☐ TCLP EXT ☐ ORGANIC ☐	METHOD:	200.0 ☐ ~~200.7~~ ☐ 3010A ☑ 3050B ☐ 3051 ☐ Diss 6020

	CLIENT	CLIENT ID	GCAL ID	INITIAL VOL/WT (mL) g	FINAL VOLUME (mL)	SAMPLE TYPE	COMMENTS
1	QC ACCOUNT	MB for HBN 543538 [DIGM/37312]	1372696	50	50	MB	
2	QC ACCOUNT	LCS for HBN 543538 [DIGM/37312	1372697	↓	↓	LCS	
3	4803	GWC-13	21410130325			SAMPLE	lab filtered
4	4747	MA01MW002	21410220501			SAMPLE	Field filtered
5	QC ACCOUNT	MA01MW002 (1372526MS)	1372698			MS	↓
6	QC ACCOUNT	MA01MW002 (1372526MSD)	1372699			MSD	
7	4747	MA01MW001	21410220503			SAMPLE	
8	4747	MA01MW004	21410220504			SAMPLE	
9	4747	MA01MW004-a	21410220505			FLDDUP	
10	4747	MA01MW003	21410220507			SAMPLE	
11	4804	GEWC-1	21410220801	↓	↓	SAMPLE	lab filtered
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							

REAGENTS/ STANDARDS
HNO3 Ultra 2122327
HCL NA
H2O2 NA
SOLID MATERIAL: NA
PDMS SPIC 280U217399
PDMS [illegible] SPIC 280U213842
PDMS [illegible] SPIC 280U213874
PDMS [illegible] SPIC 500U217310
SPIKING SOLUTIONS (LCS/MS)
GCALI-1 - 250uL NA
GCALI-2 - 250uL NA
ORGANOMETALLIC ICP SPIKE 0.025g NA

Samples are undigested AWG 10/23/14

COMMENTS:

BALANCE ID: NA

~~TEMP:~~ 1282190

Filter Lot #

BLOCK ID	TECHNICIAN	DATE
N/A 140803	SJ	10-22-14
REPIPET BOTTLES VERIFIED	REVIEW	DATE
N/A	AWG	10/23/14

Revision 1. 08/10/2010

ICP SAMPLE PREPARATION FORM

EXTRACTION DATE/TIME:	Start: 1400 End: 1425	BATCH NO:	543620
MATRIX:	WATER ☑ SOIL ☐ TCLP EXT ☐ ORGANIC ☐	METHOD:	200.0 ☐ 200.7 ☐ 3010A ☑ 3050B ☐ 3051 ☐ DRS (e020

	CLIENT	CLIENT ID	GCAL ID	INITIAL VOL/WT mL g	FINAL VOLUME (mL)	SAMPLE TYPE	COMMENTS	REAGENTS/ STANDARDS
1	QC ACCOUNT	MB for HBN 543620 [DIGM/37325]	1373162	50	50	MB		HNO3 Ultrex 272301
2	QC ACCOUNT	LCS for HBN 543620 [DIGM/37325	1373163			LCS		
3	4747	M114MW002	21410220509			SAMPLE	Gold Filtered	HCL NA
4	QC ACCOUNT	M114MW002 (1373074MS)	1373164			MS		
5	QC ACCOUNT	M114MW002 (1373074MSD)	1373165			MSD		H2O2 NA
6	4747	M114MW003	21410220511			SAMPLE		
7	4747	M114MW004	21410220512			SAMPLE		SOLID MATERIAL NA
8	4747	M114MW001	21410220514			SAMPLE		
9								
10								
11								
12								
13								
14								
15								
16								
17								SPIKING SOLUTIONS (LCS/MS)
18								
19								GCALI-1 - 250uL NA
20								
21								GCALI-2 - 250uL NA
22								
23								ORGANOMETALLIC ICP SPIKE 0.025g NA
24								
25								
26								
27								
28								

Samples are undigested

COMMENTS:

BALANCE ID: NA TEMP: NA

BLOCK ID	TECHNICIAN	DATE
1A 140803	JCA	10-24-14
REPIPET BOTTLES VERIFIED	REVIEW	DATE
N/A	AWG	10/27/14

Revision 1, 08/10/2010

ICP SAMPLE PREPARATION FORM

EXTRACTION DATE/TIME:	Start: 1405 End: 1420	BATCH NO:	543681
MATRIX:	WATER ☑ SOIL ☐ TCLP EXT ☐ ORGANIC ☐	METHOD:	200.0 ☐ 200.7 ☐ 3010A ☑ 3050B ☐ 3051 ☐ Diss Cd Co

	CLIENT	CLIENT ID	GCAL ID	INITIAL VOL/WT mL g	FINAL VOLUME (mL)	SAMPLE TYPE	COMMENTS	REAGENTS/ STANDARDS
1	QC ACCOUNT	MB for HBN 543681 [DIGM/37333]	1373485	80	80	MB		HNO3 UH129 272827
2	QC ACCOUNT	LCS for HBN 543681 [DIGM/37333	1373486			LCS		
3	4271	BC-38	21410240101			SAMPLE	field filtered	HCL NA
4	4271	BC-48	21410240102			SAMPLE		
5	4271	BC-41	21410240103			SAMPLE		H2O2 NA
6	4271	BC-42	21410240104			SAMPLE		
7	4271	BC-40	21410240105			SAMPLE		SOLID MATERIAL NA
8	4271	BC-43	21410240106			SAMPLE		
9	4271	BC-44	21410240107			SAMPLE		
10	4271	BC-45	21410240108			SAMPLE		
11	4271	BC-46	21410240109			SAMPLE		
12	4271	BC-47	21410240110			SAMPLE		
13	4747	MWQ-24	21410220515			SAMPLE		
14	4747	MWQ-24-MS	21410220516			MS		
15	4747	MWQ-24-SD	21410220517			MSD		
16	4747	MAO2MW001D	21410220520			SAMPLE		
17	4802	1	21410241401			SAMPLE	not filtered	SPIKING SOLUTIONS (LCS/MS)
18	4802	2	21410241402			SAMPLE		
19	4802	3	21410241403			SAMPLE		GCALI-1 - 250uL NA
20	4802	4	21410241404			SAMPLE		
21	4802	5	21410241405	↓	↓	SAMPLE	↓	GCALI-2 - 250uL NA
22								
23								ORGANOMETALLIC ICP SPIKE 0.025g NA
24								
25								
26								
27								
28								

Samples are undigested

COMMENTS:

BALANCE ID: NA

TEMP F Herff 1128/14

AWG 10/27/14

BLOCK ID	TECHNICIAN	DATE
N/A 140802	JEL	10-24-14
REPIPET BOTTLES VERIFIED	**REVIEW**	**DATE**
N/A	AWG	10/27/14

Revision 1, 08/10/2010

HG SAMPLE PREPARATION FORM

EXTRACTION DATE/TIME:	Start 9:30 End: 11:30	BATCH NO:	543567
MATRIX:	WATER ☑ SOIL ☐ TCLP EXT ☐ ORGANIC ☐	METHOD:	245.2 ☐ 7470A ☑ 7471B ☐

	CLIENT	CLIENT ID	GCAL ID	INITIAL VOL/WT mL g	FINAL VOLUME (mL)	SAMPLE TYPE	COMMENTS	REAGENTS/ STANDARDS
1	QC ACCOUNT	MB for HBN 543567 [DIGM/37320]	1372876	20	20	MB		HNO3 717219M
2	QC ACCOUNT	LCS for HBN 543567 [DIGM/37320	1372877			LCS		
3	4271	SW 16 25FT	21410225703			SAMPLE	Field filtered	H2SO4 717219M
4	4271	SW 16 50FT	21410225704			SAMPLE		
5	4271	SW 16 75FT	21410225705			SAMPLE		Aqua Regia NA
6	4271	SW 16 100FT	21410225706			SAMPLE		
7	4271	SW 16 125FT	21410225707			SAMPLE		KMN04 726161
8	4271	SW 16 150FT	21410225708			SAMPLE		
9	QC ACCOUNT	SW 16 150FT (1372780MS)	1372878			MS		K2S2O6 726161
10	QC ACCOUNT	SW 16 150FT (1372780MSD)	1372879			MSD		
11	4271	SW 16 175FT	21410225709			SAMPLE		Hg Calib ID 10-23-14
12	4271	SW 16 200FT	21410225710			SAMPLE		
13	4271	SW 16 225FT	21410225711			SAMPLE		0.1 ppm CCV Working Solution 703-83-10
14	4271	SW 16 SURFACE	21410225701			SAMPLE		
15	4271	SW 16 10FT	21410225702			SAMPLE		0.1 ppm ICV Working Solution 703-83-11
16	4747	MA01MW002	21410220501			SAMPLE		
17	4747	MA01MW001	21410220503			SAMPLE		Hg ICV 10-23-14
18	4747	MA01MW004	21410220504			SAMPLE		
19	4747	MA01MW004-a	21410220505			FLDDUP		SPIKE SOLUTIONS (LCS/MS)
20	4747	MA01MW003	21410220507			SAMPLE		
21								Hg Spike 1000L 1500L 703-83-10
22								
23								ORGANOMETALLIC HG SPIKE 0.025g NA
24								
25								SOLID MATERIAL: NA
26								

Hg Solid Calibration

Calib Blk	Conc (ug/L)	0.1ppm Spk Added	Final Volume
Standard 1	0.20	60 uL	30mL
Standard 2	0.50	150 uL	30 mL
Standard 3	2.00	600 uL	30 mL
Standard 4	5.00	1500 ul	30 mL
Standard 5	10.0	3000 uL	30 mL
ICV	5.00	1500 uL	30 mL

Hg Water Calibration

Calib Blk	Conc (ug/L)	0.1ppm Spk Added	Final Volume
Standard 1	0.20	40 uL	20 mL
Standard 2	0.50	100 uL	20 mL
Standard 3	2.00	400 uL	20 mL
Standard 4	5.00	1000 ul	20 mL
Standard 5	10.0	2000 uL	20 mL
ICV	5.00	1000 uL	20 mL

BLOCK ID	TECHNICIAN	DATE
A7 140803	JCL	10-23-14
REPIPET BOTTLES VERIFIED	**REVIEW**	**DATE**
N/A	AWG	10/23/14

BALANCE ID: NA TEMP: 0930

Revision 1 08/10/2010

HG SAMPLE PREPARATION FORM

EXTRACTION DATE/TIME:	Start: 15:30 End: 17:30	BATCH NO:	543617
MATRIX:	WATER ☑ SOIL ☐ TCLP EXT ☐ ORGANIC ☐	METHOD:	245.2 ☐ 7470A ☑ 7471B ☐

	CLIENT	CLIENT ID	GCAL ID	INITIAL VOL/WT mL g	FINAL VOLUME (mL)	SAMPLE TYPE	COMMENTS	REAGENTS/ STANDARDS
1	QC ACCOUNT	MB for HBN 543617 [DIGM/37323]	1373154	20	20	MB		HNO3 272794
2	QC ACCOUNT	LCS for HBN 543617 [DIGM/37323	1373155			LCS		
3	4747	MA01MW002	21410220501			SAMPLE	Field Filtered	H2SO4 272194
4	4747	MA01MW001	21410220503			SAMPLE		
5	4747	MA01MW004	21410220504			SAMPLE		Aqua Regia NA
6	4747	MA01MW004-a	21410220505			FLDDUP		
7	QC ACCOUNT	MA01MW004-a (1372533MS)	1373156			MS		KMN04 TLL-1164
8	QC ACCOUNT	MA01MW004-a (1372533MSD)	1373157			MSD		
9	4747	MA01MW003	21410220507			SAMPLE		K2S2O6 TLL-1161
10	4747	M114MW002	21410220509			SAMPLE		
11	4747	M114MW003	21410220511			SAMPLE		Hg Calib ID NA
12	4747	M114MW004	21410220512			SAMPLE		
13	4747	M114MW001	21410220514			SAMPLE		0.1 ppm CCV Working Solution NA
14	0176	1-RT0225028 (TCLP)	21410215501			SAMPLE	acid Du 16:30	
15	QC ACCOUNT	1-RT0225028 (TCLP) (1372334MS)	1373459			MS		0.1 ppm ICV Working Solution NA
16	0176	2-RT0725005 (TCLP)	21410215502			SAMPLE		
17	0176	3-RT102525 (TCLP)	21410215503			SAMPLE		Hg ICV NA
18	0176	4-RT0325017 (TCLP)	21410215504			SAMPLE		
19	0176	5-RT042550 (TCLP)	21410215505			SAMPLE		SPIKE SOLUTIONS (LCS/MS)
20	0176	6-RT0325037 (TCLP)	21410215506			SAMPLE		
21	0176	7-RT0725089 (TCLP)	21410215507			SAMPLE		Hg Spike ~~100u~~ 150u 213-83-10
22	0176	8-RT022561 (TCLP)	21410215508			SAMPLE		
23	0176	PUMICE	21410221301			SAMPLE		ORGANOMETALLIC HG SPIKE 0.025g NA
24								
25								SOLID MATERIAL: NA
26								

Hg Solid Calibration

Calib Blk	Conc (ug/L)	0.1ppm Spk Added	Final Volume
Standard 1	0.20	60 uL	30mL
Standard 2	0.50	150 uL	30 mL
Standard 3	2.00	600 uL	30 mL
Standard 4	5.00	1500 ul	30 mL
Standard 5	10.0	3000 uL	30 mL
ICV	5.00	1500 uL	30 mL

Hg Water Calibration

Calib Blk	Conc (ug/L)	0.1ppm Spk Added	Final Volume
Standard 1	0.20	40 uL	20 mL
Standard 2	0.50	100 uL	20 mL
Standard 3	2.00	400 uL	20 mL
Standard 4	5.00	1000 ul	20 mL
Standard 5	10.0	2000 uL	20 mL
ICV	5.00	1000 uL	20 mL

BLOCK ID	TECHNICIAN	DATE
A2 140803	JEL	10-23-14
REPIPET BOTTLES VERIFIED	**REVIEW**	**DATE**
10/4	AWG	10/27/14

BALANCE ID: NA TEMP: 93°

Revision 1 08/10/2010

HG SAMPLE PREPARATION FORM

EXTRACTION DATE/TIME:	Start: 15:30 End: 14:30	BATCH NO:	543618
MATRIX:	WATER ☑ SOIL ☐ TCLP EXT ☐ ORGANIC ☐	METHOD:	245.2 ☐ 7470A ☑ 7471B ☐

	CLIENT	CLIENT ID	GCAL ID	INITIAL VOL/WT mL g	FINAL VOLUME (mL)	SAMPLE TYPE	COMMENTS	REAGENTS/ STANDARDS
1	QC ACCOUNT	MB for HBN 543618 [DIGM/37324]	1373158	20	20	MB		HNO3 272794
2	QC ACCOUNT	LCS for HBN 543618 [DIGM/37324	1373159			LCS		
3	4271	OXY #1	21410230601			SAMPLE		H2SO4 722194
4	QC ACCOUNT	OXY #1(1373028MS)	1373160			MS		
5	QC ACCOUNT	OXY #1(1373028MSD)	1373161			MSD		Aqua Regia NA
6	4271	OXY #2	21410230602			SAMPLE		
7	4747	M114MW002	21410220509			SAMPLE		KMNO4 7722841
8	4747	M114MW003	21410220511			SAMPLE		
9	4747	M114MW004	21410220512			SAMPLE		K2S2O8 7727644
10	4747	M114MW001	21410220514			SAMPLE		
11	4391	MW-6	21410231401			SAMPLE		Hg Calib ID NA
12	4391	MW-7	21410231402			SAMPLE		
13	4391	MW-2A	21410231403			SAMPLE		0.1 ppm CCV Working Solution NA
14	4391	MW-1A	21410231404			SAMPLE		
15	4391	MW-3	21410231405			SAMPLE		0.1 ppm ICV Working Solution NA
16	4391	MW-4B	21410231406			SAMPLE		
17	4391	DUPLICATE	21410231408	"	"	FLDDUP		Hg ICV NA
18								
19								SPIKE SOLUTIONS (LCS/MS)
20								
21								Hg Spike ~~100uL~~ ~~150uL~~ 400uL 783-8340
22								
23								ORGANOMETALLIC HG SPIKE 0.025g NA
24								
25								SOLID MATERIAL: NA
26								

Hg Solid Calibration

Calib Blk	Conc (ug/L)	0.1ppm Spk Added	Final Volume
Standard 1	0.20	60 uL	30mL
Standard 2	0.50	150 uL	30 mL
Standard 3	2.00	600 uL	30 mL
Standard 4	5.00	1500 ul	30 mL
Standard 5	10.0	3000 uL	30 mL
ICV	5.00	1500 uL	30 mL

Hg Water Calibration

Calib Blk	Conc (ug/L)	0.1ppm Spk Added	Final Volume
Standard 1	0.20	40 uL	20 mL
Standard 2	0.50	100 uL	20 mL
Standard 3	2.00	400 uL	20 mL
Standard 4	5.00	1000 ul	20 mL
Standard 5	10.0	2000 uL	20 mL
ICV	5.00	1000 uL	20 mL

BLOCK ID	TECHNICIAN	DATE
AZ 140803	SC	10-23-14
REPIPET BOTTLES VERIFIED	**REVIEW**	**DATE**
N/A	AWG	10/27/14

BALANCE ID: NA TEMP: 95°

214102205 536

HG SAMPLE PREPARATION FORM

EXTRACTION DATE/TIME:	Start: 11:30 End: 13:30	BATCH NO:	543682
MATRIX:	WATER ☑ SOIL ☐ TCLP EXT ☐ ORGANIC ☐	METHOD:	245.2 ☐ 7470A ☑ 7471B ☐

	CLIENT	CLIENT ID	GCAL ID	INITIAL VOL/WT mL g	FINAL VOLUME (mL)	SAMPLE TYPE	COMMENTS	REAGENTS/ STANDARDS
1	QC ACCOUNT	MB for HBN 543682 [DIGM/37334]	1373489	20	20	MB		HNO3 21229H
2	QC ACCOUNT	LCS for HBN 543682 [DIGM/37334	1373490			LCS		
3	4271	BC-38	21410240101			SAMPLE	Field Filtered	H2SO4 21219H
4	4271	BC-48	21410240102			SAMPLE		
5	4271	BC-41	21410240103			SAMPLE		Aqua Regia NA
6	4271	BC-42	21410240104			SAMPLE		
7	4271	BC-40	21410240105			SAMPLE		KMNO4 Yellow
8	QC ACCOUNT	BC-40(1373469MS)	1373491			MS		
9	QC ACCOUNT	BC-40(1373469MSD)	1373492			MSD		K2S2O6 Yellow
10	4271	BC-43	21410240106			SAMPLE		
11	4271	BC-44	21410240107			SAMPLE		Hg Calib ID 10-24-14
12	4271	BC-45	21410240108			SAMPLE		
13	4271	BC-46	21410240109			SAMPLE		0.1 ppm CCV Working Solution 243-88-5
14	4271	BC-47	21410240110			SAMPLE		
15	4747	MWQ-24	21410220515			SAMPLE	Field Filtered	0.1 ppm ICV Working Solution 243-88-6
16	4747	MWQ-24	21410220515			SAMPLE		
17	4747	MWQ-24-MS	21410220516			MS	Field Filtered	Hg ICV 10-24-14
18	4747	MWQ-24-MS	21410220516			MS		
19	4747	MWQ-24-SD	21410220517			MSD	Field Filtered	SPIKE SOLUTIONS (LCS/MS)
20	4747	MWQ-24-SD	21410220517			MSD		
21	4747	MAO2MW001D	21410220520			SAMPLE	Field Filtered	Hg Spike 100ppb 243-88-5
22	4747	MAO2MW001D	21410220520			SAMPLE		
23								ORGANOMETALLIC HG SPIKE 0.025g NA
24								
25								SOLID MATERIAL: NA
26								

Hg Solid Calibration

Calib Blk	Conc (ug/L)	0.1ppm Spk Added	Final Volume
Standard 1	0.20	60 uL	30mL
Standard 2	0.50	150 uL	30 mL
Standard 3	2.00	600 uL	30 mL
Standard 4	5.00	1500 ul	30 mL
Standard 5	10.0	3000 uL	30 mL
ICV	5.00	1500 uL	30 mL

Hg Water Calibration

Calib Blk	Conc (ug/L)	0.1ppm Spk Added	Final Volume
Standard 1	0.20	40 uL	20 mL
Standard 2	0.50	100 uL	20 mL
Standard 3	2.00	400 uL	20 mL
Standard 4	5.00	1000 ul	20 mL
Standard 5	10.0	2000 uL	20 mL
ICV	5.00	1000 uL	20 mL

BLOCK ID	TECHNICIAN	DATE
A1 140807	SEL	10-24-14
REPIPET BOTTLES VERIFIED	**REVIEW**	**DATE**
N/A	AWG	10/27/14

BALANCE ID: NA TEMP: RT

Sample Results

MA01MW002	**Collect Date**	10/21/2014 10:40	**GCAL ID**	21410220501
	Receive Date	10/22/2014 09:20	**Matrix**	Water

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	200	10/25/2014 02:10	DMT	543691

CAS#	Parameter	Result	MDL	LOQ	Units
16887-00-6	Chloride	443	10.0	40.0	mg/L
14808-79-8	Sulfate	534	10.0	40.0	mg/L

EPA 353.2 Nitrate

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/22/2014 17:04	JEM	543530

CAS#	Parameter	Result	MDL	LOQ	Units
14797-55-8	Nitrate	0.458	0.008	0.010	mg/L-N

EPA 353.2 Nitrite

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/22/2014 17:38	JEM	543529

CAS#	Parameter	Result	MDL	LOQ	Units
14797-65-0	Nitrite	0.008J	0.006	0.010	mg/L-N

EPA 9012B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
10/22/2014 12:30	543494	Cyanide Prep	1	10/27/2014 19:02	JEM	543866

CAS#	Parameter	Result	MDL	LOQ	Units
57-12-5	Cyanide	0.0014J	0.00050	0.0050	mg/L

SM 2320 B-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/23/2014 07:54	DJH	543589

CAS#	Parameter	Result	MDL	LOQ	Units
000000-00-5	Total Alkalinity	186	0.26	1.0	mg/L CaCO3

214102205 539

Sample Results

MA01MW002

Collect Date	10/21/2014 10:40	**GCAL ID**	21410220501
Receive Date	10/22/2014 09:20	**Matrix**	Water

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/23/2014 16:22	AJE	543633

CAS#	Parameter	Result	MDL	LOQ	Units
WET-035	Total Dissolved Solids(TDS)	1710	10.0	10.0	mg/L

MA01MW001

Collect Date	10/21/2014 12:20	**GCAL ID**	21410220503
Receive Date	10/22/2014 09:20	**Matrix**	Water

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	200	10/25/2014 03:20	DMT	543691

CAS#	Parameter	Result	MDL	LOQ	Units
16887-00-6	Chloride	523	10.0	40.0	mg/L
14808-79-8	Sulfate	617	10.0	40.0	mg/L

EPA 353.2 Nitrate

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/22/2014 17:08	JEM	543530

CAS#	Parameter	Result	MDL	LOQ	Units
14797-55-8	Nitrate	0.289	0.008	0.010	mg/L-N

EPA 353.2 Nitrite

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/22/2014 17:42	JEM	543529

CAS#	Parameter	Result	MDL	LOQ	Units
14797-65-0	Nitrite	0.006U	0.006	0.010	mg/L-N

EPA 9012B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
10/22/2014 12:30	543494	Cyanide Prep	1	10/27/2014 19:03	JEM	543866

CAS#	Parameter	Result	MDL	LOQ	Units
57-12-5	Cyanide	0.0015J	0.00050	0.0050	mg/L

Sample Results

MA01MW001

Collect Date 10/21/2014 12:20 **GCAL ID** 21410220503
Receive Date 10/22/2014 09:20 **Matrix** Water

SM 2320 B-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/23/2014 07:54	DJH	543589

CAS#	Parameter	Result	MDL	LOQ	Units
000000-00-5	Total Alkalinity	177	0.26	1.0	mg/L CaCO3

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/23/2014 16:22	AJE	543633

CAS#	Parameter	Result	MDL	LOQ	Units
WET-035	Total Dissolved Solids(TDS)	1890	10.0	10.0	mg/L

MA01MW004

Collect Date 10/21/2014 11:00 **GCAL ID** 21410220504
Receive Date 10/22/2014 09:20 **Matrix** Water

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	200	10/25/2014 03:55	DMT	543691

CAS#	Parameter	Result	MDL	LOQ	Units
16887-00-6	Chloride	255	10.0	40.0	mg/L
14808-79-8	Sulfate	333	10.0	40.0	mg/L

EPA 353.2 Nitrate

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2	10/22/2014 17:05	JEM	543530

CAS#	Parameter	Result	MDL	LOQ	Units
14797-55-8	Nitrate	0.811	0.016	0.020	mg/L-N

EPA 353.2 Nitrite

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/22/2014 17:40	JEM	543529

CAS#	Parameter	Result	MDL	LOQ	Units
14797-65-0	Nitrite	0.006U	0.006	0.010	mg/L-N

Sample Results

MA01MW004

Collect Date	10/21/2014 11:00	**GCAL ID**	21410220504
Receive Date	10/22/2014 09:20	**Matrix**	Water

EPA 9012B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
10/22/2014 12:30	543494	Cyanide Prep	1	10/27/2014 19:04	JEM	543866

CAS#	Parameter	Result	MDL	LOQ	Units
57-12-5	Cyanide	0.0020J	0.00050	0.0050	mg/L

SM 2320 B-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/23/2014 07:54	DJH	543589

CAS#	Parameter	Result	MDL	LOQ	Units
000000-00-5	Total Alkalinity	196	0.26	1.0	mg/L CaCO3

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/23/2014 16:22	AJE	543633

CAS#	Parameter	Result	MDL	LOQ	Units
WET-035	Total Dissolved Solids(TDS)	1140	10.0	10.0	mg/L

MA01MW004-a

Collect Date	10/21/2014 11:00	**GCAL ID**	21410220505
Receive Date	10/22/2014 09:20	**Matrix**	Water

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	200	10/25/2014 04:29	DMT	543691

CAS#	Parameter	Result	MDL	LOQ	Units
16887-00-6	Chloride	250	10.0	40.0	mg/L
14808-79-8	Sulfate	344	10.0	40.0	mg/L

EPA 353.2 Nitrate

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2	10/22/2014 17:06	JEM	543530

CAS#	Parameter	Result	MDL	LOQ	Units
14797-55-8	Nitrate	0.835	0.016	0.020	mg/L-N

Sample Results

MA01MW004-a

Collect Date 10/21/2014 11:00 **GCAL ID** 21410220505
Receive Date 10/22/2014 09:20 **Matrix** Water

EPA 353.2 Nitrite

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/22/2014 17:41	JEM	543529

CAS#	Parameter	Result	MDL	LOQ	Units
14797-65-0	Nitrite	0.006U	0.006	0.010	mg/L-N

EPA 9012B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
10/22/2014 12:30	543494	Cyanide Prep	1	10/27/2014 19:08	JEM	543866

CAS#	Parameter	Result	MDL	LOQ	Units
57-12-5	**Cyanide**	**0.0097**	**0.00050**	**0.0050**	**mg/L**

SM 2320 B-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/23/2014 07:54	DJH	543589

CAS#	Parameter	Result	MDL	LOQ	Units
000000-00-5	**Total Alkalinity**	**199**	**0.26**	**1.0**	**mg/L CaCO3**

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/23/2014 16:22	AJE	543633

CAS#	Parameter	Result	MDL	LOQ	Units
WET-035	**Total Dissolved Solids(TDS)**	**1100**	**10.0**	**10.0**	**mg/L**

MA01MW003

Collect Date 10/21/2014 12:26 **GCAL ID** 21410220507
Receive Date 10/22/2014 09:20 **Matrix** Water

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	200	10/25/2014 05:04	DMT	543691

CAS#	Parameter	Result	MDL	LOQ	Units
16887-00-6	**Chloride**	**477**	**10.0**	**40.0**	**mg/L**
14808-79-8	**Sulfate**	**549**	**10.0**	**40.0**	**mg/L**

Sample Results

MA01MW003	**Collect Date**	10/21/2014 12:26	**GCAL ID**	21410220507
	Receive Date	10/22/2014 09:20	**Matrix**	Water

EPA 353.2 Nitrate

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/22/2014 17:09	JEM	543530

CAS#	Parameter	Result	MDL	LOQ	Units
14797-55-8	**Nitrate**	**0.222**	**0.008**	**0.010**	**mg/L-N**

EPA 353.2 Nitrite

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/22/2014 17:43	JEM	543529

CAS#	Parameter	Result	MDL	LOQ	Units
14797-65-0	Nitrite	0.006U	0.006	0.010	mg/L-N

EPA 9012B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
10/22/2014 12:30	543494	Cyanide Prep	1	10/27/2014 19:09	JEM	543866

CAS#	Parameter	Result	MDL	LOQ	Units
57-12-5	**Cyanide**	**0.0025J**	**0.00050**	**0.0050**	**mg/L**

SM 2320 B-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/23/2014 07:54	DJH	543589

CAS#	Parameter	Result	MDL	LOQ	Units
000000-00-5	**Total Alkalinity**	**163**	**0.26**	**1.0**	**mg/L CaCO3**

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/23/2014 16:22	AJE	543633

CAS#	Parameter	Result	MDL	LOQ	Units
WET-035	**Total Dissolved Solids(TDS)**	**1790**	**10.0**	**10.0**	**mg/L**

Sample Results

M114MW002	**Collect Date**	10/22/2014 09:35	**GCAL ID**	21410220509
	Receive Date	10/23/2014 09:40	**Matrix**	Water

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1000	10/25/2014 06:15	DMT	543701

CAS#	Parameter	Result	MDL	LOQ	Units
16887-00-6	Chloride	2120	50.0	200	mg/L
14808-79-8	Sulfate	1120	50.0	200	mg/L

EPA 353.2 Nitrate

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/23/2014 14:33	JEM	543625

CAS#	Parameter	Result	MDL	LOQ	Units
14797-55-8	Nitrate	0.371	0.008	0.010	mg/L-N

EPA 353.2 Nitrite

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/23/2014 14:55	JEM	543624

CAS#	Parameter	Result	MDL	LOQ	Units
14797-65-0	Nitrite	0.006U	0.006	0.010	mg/L-N

EPA 9012B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
10/24/2014 10:30	543680	Cyanide Prep	1	10/28/2014 12:28	DJH	543876

CAS#	Parameter	Result	MDL	LOQ	Units
57-12-5	Cyanide	0.0013J	0.00050	0.0050	mg/L

SM 2320 B-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/04/2014 19:40	KLC2	544398

CAS#	Parameter	Result	MDL	LOQ	Units
000000-00-5	Total Alkalinity	74.1	0.26	1.0	mg/L CaCO3

214102205 544

Sample Results

M114MW002

Collect Date 10/22/2014 09:35 **GCAL ID** 21410220509
Receive Date 10/23/2014 09:40 **Matrix** Water

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/23/2014 16:22	AJE	543633

CAS#	Parameter	Result	MDL	LOQ	Units
WET-035	Total Dissolved Solids(TDS)	8680	10.0	10.0	mg/L

M114MW003

Collect Date 10/22/2014 11:10 **GCAL ID** 21410220511
Receive Date 10/23/2014 09:40 **Matrix** Water

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1000	10/26/2014 19:40	DMT	543758

CAS#	Parameter	Result	MDL	LOQ	Units
16887-00-6	Chloride	4180	50.0	200	mg/L
14808-79-8	Sulfate	2240	50.0	200	mg/L

EPA 353.2 Nitrate

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2	10/23/2014 14:46	JEM	543625

CAS#	Parameter	Result	MDL	LOQ	Units
14797-55-8	Nitrate	1.08	0.016	0.020	mg/L-N

EPA 353.2 Nitrite

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/23/2014 15:00	JEM	543624

CAS#	Parameter	Result	MDL	LOQ	Units
14797-65-0	Nitrite	0.006U	0.006	0.010	mg/L-N

EPA 9012B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
10/24/2014 10:30	543680	Cyanide Prep	1	10/28/2014 10:31	DJH	543876

CAS#	Parameter	Result	MDL	LOQ	Units
57-12-5	Cyanide	0.00050J	0.00050	0.0050	mg/L

Sample Results

M114MW003

Collect Date 10/22/2014 11:10 **GCAL ID** 21410220511
Receive Date 10/23/2014 09:40 **Matrix** Water

SM 2320 B-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/27/2014 11:14	DJH	543830

CAS#	Parameter	Result	MDL	LOQ	Units
000000-00-5	Total Alkalinity	76.9	0.26	1.0	mg/L CaCO3

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/27/2014 14:22	BMS	543840

CAS#	Parameter	Result	MDL	LOQ	Units
WET-035	Total Dissolved Solids(TDS)	9390	10.0	10.0	mg/L

M114MW004

Collect Date 10/22/2014 10:25 **GCAL ID** 21410220512
Receive Date 10/23/2014 09:40 **Matrix** Water

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1000	10/26/2014 20:15	DMT	543758

CAS#	Parameter	Result	MDL	LOQ	Units
16887-00-6	Chloride	4010	50.0	200	mg/L
14808-79-8	Sulfate	2080	50.0	200	mg/L

EPA 353.2 Nitrate

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/23/2014 14:36	JEM	543625

CAS#	Parameter	Result	MDL	LOQ	Units
14797-55-8	Nitrate	0.857	0.008	0.010	mg/L-N

EPA 353.2 Nitrite

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/23/2014 14:59	JEM	543624

CAS#	Parameter	Result	MDL	LOQ	Units
14797-65-0	Nitrite	0.006U	0.006	0.010	mg/L-N

Sample Results

M114MW004

Collect Date 10/22/2014 10:25 **GCAL ID** 21410220512
Receive Date 10/23/2014 09:40 **Matrix** Water

EPA 9012B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
10/24/2014 10:30	543680	Cyanide Prep	1	10/28/2014 10:32	DJH	543876

CAS#	Parameter	Result	MDL	LOQ	Units
57-12-5	Cyanide	0.00070J	0.00050	0.0050	mg/L

SM 2320 B-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/27/2014 11:14	DJH	543830

CAS#	Parameter	Result	MDL	LOQ	Units
000000-00-5	Total Alkalinity	85.5	0.26	1.0	mg/L CaCO3

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/23/2014 16:22	AJE	543633

CAS#	Parameter	Result	MDL	LOQ	Units
WET-035	Total Dissolved Solids(TDS)	8940	10.0	10.0	mg/L

M114MW001

Collect Date 10/22/2014 12:35 **GCAL ID** 21410220514
Receive Date 10/23/2014 09:40 **Matrix** Water

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2000	10/27/2014 23:00	JEM	543810

CAS#	Parameter	Result	MDL	LOQ	Units
16887-00-6	Chloride	3100	100	400	mg/L
14808-79-8	Sulfate	1990	100	400	mg/L

EPA 353.2 Nitrate

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2	10/23/2014 14:48	JEM	543625

CAS#	Parameter	Result	MDL	LOQ	Units
14797-55-8	Nitrate	1.26	0.016	0.020	mg/L-N

Sample Results

M114MW001

Collect Date 10/22/2014 12:35 **GCAL ID** 21410220514
Receive Date 10/23/2014 09:40 **Matrix** Water

EPA 353.2 Nitrite

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/23/2014 15:02	JEM	543624

CAS#	Parameter	Result	MDL	LOQ	Units
14797-65-0	Nitrite	0.006U	0.006	0.010	mg/L-N

EPA 9012B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
10/24/2014 10:30	543680	Cyanide Prep	1	10/28/2014 10:33	DJH	543876

CAS#	Parameter	Result	MDL	LOQ	Units
57-12-5	Cyanide	0.0023J	0.00050	0.0050	mg/L

SM 2320 B-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/27/2014 11:14	DJH	543830

CAS#	Parameter	Result	MDL	LOQ	Units
000000-00-5	Total Alkalinity	96.2	0.26	1.0	mg/L CaCO3

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/27/2014 14:22	BMS	543840

CAS#	Parameter	Result	MDL	LOQ	Units
WET-035	Total Dissolved Solids(TDS)	8190	10.0	10.0	mg/L

MWQ-24

Collect Date 10/23/2014 09:32 **GCAL ID** 21410220515
Receive Date 10/24/2014 09:35 **Matrix** Water

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	5	10/27/2014 02:25	DMT	543758

CAS#	Parameter	Result	MDL	LOQ	Units
16887-00-6	Chloride	5.39	0.250	1.00	mg/L

Sample Results

MWQ-24	**Collect Date**	10/23/2014 09:32	**GCAL ID**	21410220515
	Receive Date	10/24/2014 09:35	**Matrix**	Water

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	50	10/26/2014 12:55	DMT	543758

CAS#	Parameter	Result	MDL	LOQ	Units
14808-79-8	**Sulfate**	**51.7**	**2.50**	**10.0**	**mg/L**

EPA 353.2 Nitrate

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	10	10/24/2014 13:29	DMT	543706

CAS#	Parameter	Result	MDL	LOQ	Units
14797-55-8	**Nitrate**	**3.76**	**0.082**	**0.100**	**mg/L-N**

EPA 353.2 Nitrite

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/24/2014 13:45	DMT	543705

CAS#	Parameter	Result	MDL	LOQ	Units
14797-65-0	Nitrite	0.006U	0.006	0.010	mg/L-N

EPA 9012B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
11/05/2014 16:00	544446	Cyanide Prep	1	11/06/2014 09:55	JEM	544506

CAS#	Parameter	Result	MDL	LOQ	Units
57-12-5	**Cyanide**	**0.0014J**	**0.00050**	**0.0050**	**mg/L**

SM 2320 B-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/27/2014 08:04	DJH	543808

CAS#	Parameter	Result	MDL	LOQ	Units
000000-00-5	**Total Alkalinity**	**212**	**0.26**	**1.0**	**mg/L CaCO3**

Sample Results

MWQ-24

Collect Date 10/23/2014 09:32 **GCAL ID** 21410220515
Receive Date 10/24/2014 09:35 **Matrix** Water

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/27/2014 14:22	BMS	543840

CAS#	Parameter	Result	MDL	LOQ	Units
WET-035	Total Dissolved Solids(TDS)	344	10.0	10.0	mg/L

MWQ-24-ms

Collect Date 10/23/2014 09:32 **GCAL ID** 21410220516
Receive Date 10/24/2014 09:35 **Matrix** Water

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	5	10/27/2014 02:43	DMT	543758

CAS#	Parameter	Result	MDL	LOQ	Units
16887-00-6	Chloride	18.0	0.250	1.00	mg/L

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	50	10/26/2014 13:13	DMT	543758

CAS#	Parameter	Result	MDL	LOQ	Units
14808-79-8	Sulfate	172	2.50	10.0	mg/L

EPA 353.2 Nitrate

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	10	10/24/2014 13:31	DMT	543706

CAS#	Parameter	Result	MDL	LOQ	Units
14797-55-8	Nitrate	8.73	0.082	0.100	mg/L-N

EPA 353.2 Nitrite

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/24/2014 13:46	DMT	543705

CAS#	Parameter	Result	MDL	LOQ	Units
14797-65-0	Nitrite	0.514	0.006	0.010	mg/L-N

Sample Results

MWQ-24-ms

Collect Date	10/23/2014 09:32	**GCAL ID**	21410220516
Receive Date	10/24/2014 09:35	**Matrix**	Water

EPA 9012B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
11/05/2014 16:00	544446	Cyanide Prep	1	11/06/2014 09:56	JEM	544506

CAS#	Parameter	Result	MDL	LOQ	Units
57-12-5	Cyanide	0.089	0.00050	0.0050	mg/L

MWQ-24-sd

Collect Date	10/23/2014 09:32	**GCAL ID**	21410220517
Receive Date	10/24/2014 09:35	**Matrix**	Water

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	50	10/26/2014 13:30	DMT	543758

CAS#	Parameter	Result	MDL	LOQ	Units
14808-79-8	Sulfate	172	2.50	10.0	mg/L

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	5	10/27/2014 03:00	DMT	543758

CAS#	Parameter	Result	MDL	LOQ	Units
16887-00-6	Chloride	18.0	0.250	1.00	mg/L

EPA 353.2 Nitrate

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	10	10/24/2014 13:32	DMT	543706

CAS#	Parameter	Result	MDL	LOQ	Units
14797-55-8	Nitrate	8.62	0.082	0.100	mg/L-N

EPA 353.2 Nitrite

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/24/2014 13:48	DMT	543705

CAS#	Parameter	Result	MDL	LOQ	Units
14797-65-0	Nitrite	0.512	0.006	0.010	mg/L-N

Sample Results

MWQ-24-sd

Collect Date: 10/23/2014 09:32
Receive Date: 10/24/2014 09:35
GCAL ID: 21410220517
Matrix: Water

EPA 9012B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
11/05/2014 16:00	544446	Cyanide Prep	1	11/06/2014 09:57	JEM	544506

CAS#	Parameter	Result	MDL	LOQ	Units
57-12-5	Cyanide	0.089	0.00050	0.0050	mg/L

MWQ-24-a

Collect Date: 10/23/2014 09:32
Receive Date: 10/24/2014 09:35
GCAL ID: 21410220518
Matrix: Water

SM 2320 B-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/27/2014 08:04	DJH	543808

CAS#	Parameter	Result	MDL	LOQ	Units
000000-00-5	Total Alkalinity	216	0.26	1.0	mg/L CaCO3

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/27/2014 14:22	BMS	543840

CAS#	Parameter	Result	MDL	LOQ	Units
WET-035	Total Dissolved Solids(TDS)	432	10.0	10.0	mg/L

MA02MW001D

Collect Date: 10/23/2014 11:43
Receive Date: 10/24/2014 09:35
GCAL ID: 21410220520
Matrix: Water

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1000	10/26/2014 15:33	DMT	543758

CAS#	Parameter	Result	MDL	LOQ	Units
16887-00-6	Chloride	2290	50.0	200	mg/L
14808-79-8	Sulfate	2230	50.0	200	mg/L

Sample Results

MA02MW001D	**Collect Date**	10/23/2014 11:43	**GCAL ID**	21410220520
	Receive Date	10/24/2014 09:35	**Matrix**	Water

EPA 353.2 Nitrate

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	5	10/24/2014 13:33	DMT	543706

CAS#	Parameter	Result	MDL	LOQ	Units
14797-55-8	**Nitrate**	**3.56**	**0.041**	**0.050**	**mg/L-N**

EPA 353.2 Nitrite

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/24/2014 13:49	DMT	543705

CAS#	Parameter	Result	MDL	LOQ	Units
14797-65-0	Nitrite	0.006U	0.006	0.010	mg/L-N

EPA 9012B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
10/24/2014 10:30	543680	Cyanide Prep	1	10/28/2014 12:15	RJO	543876

CAS#	Parameter	Result	MDL	LOQ	Units
57-12-5	Cyanide	0.00050U	0.00050	0.0050	mg/L

SM 2320 B-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/27/2014 11:14	DJH	543830

CAS#	Parameter	Result	MDL	LOQ	Units
000000-00-5	**Total Alkalinity**	**145**	**0.26**	**1.0**	**mg/L CaCO3**

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/27/2014 14:22	BMS	543840

CAS#	Parameter	Result	MDL	LOQ	Units
WET-035	**Total Dissolved Solids(TDS)**	**7040**	**10.0**	**10.0**	**mg/L**

General Chemistry Quality Control Summary

Analytical Batch 543589	Client ID	LCS543589
	GCAL ID	1373026
	Sample Type	LCS
	Prep Date	NA
	Analysis Date	10/23/2014 07:54
	Matrix	Water

SM 2320 B-2011		Spike Added	Result	%R	Control Limits %R
Total Alkalinity	000000-00-5	200	200	100	80 - 120

Analytical Batch 543589	Client ID	MA01MW002	1372526DUP
	GCAL ID	21410220501	1373027
	Sample Type	SAMPLE	DUP
	Prep Date	NA	NA
	Analysis Date	10/23/2014 07:54	10/23/2014 07:54
	Matrix	Water	Water

SM 2320 B-2011		Units Result	mg/L CaCO3 MDL	Result	RPD	RPD Limit
Total Alkalinity	000000-00-5	186	0.26	187	1	11

Analytical Batch 543808	Client ID	LCS543808
	GCAL ID	1374178
	Sample Type	LCS
	Prep Date	NA
	Analysis Date	10/27/2014 08:04
	Matrix	Water

SM 2320 B-2011		Spike Added	Result	%R	Control Limits %R
Total Alkalinity	000000-00-5	200	204	102	80 - 120

Analytical Batch 543808	Client ID	MWQ-24	MWQ-24-a
	GCAL ID	21410220515	21410220518
	Sample Type	SAMPLE	DUP
	Prep Date	NA	NA
	Analysis Date	10/27/2014 08:04	10/27/2014 08:04
	Matrix	Water	Water

SM 2320 B-2011		Units Result	mg/L CaCO3 MDL	Result	RPD	RPD Limit
Total Alkalinity	000000-00-5	212	0.26	216	2	11

Analytical Batch 543830	Client ID	LCS543830
	GCAL ID	1374285
	Sample Type	LCS
	Prep Date	NA
	Analysis Date	10/27/2014 11:14
	Matrix	Water

SM 2320 B-2011		Spike Added	Result	%R	Control Limits %R
Total Alkalinity	000000-00-5	200	203	102	80 - 120

Analytical Batch 544398	Client ID	LCS544398
	GCAL ID	1377298
	Sample Type	LCS
	Prep Date	NA
	Analysis Date	11/04/2014 19:40
	Matrix	Water

SM 2320 B-2011		Spike Added	Result	%R	Control Limits %R
Total Alkalinity	000000-00-5	200	216	108	80 - 120

General Chemistry Quality Control Summary

Analytical Batch	Client ID	M114MW002	1373074DUP
544398	GCAL ID	21410220509	1377299
	Sample Type	SAMPLE	DUP
	Prep Date	NA	NA
	Analysis Date	11/04/2014 19:40	11/04/2014 19:40
	Matrix	Water	Water

SM 2320 B-2011		Units Result	mg/L CaCO3 MDL	Result	RPD	RPD Limit
Total Alkalinity	000000-00-5	74.1	0.26	77.2	4	11

Analytical Batch	Client ID	MWQ-24	MWQ-24-ms	MWQ-24-sd
543758	GCAL ID	21410220515	21410220516	21410220517
	Sample Type	SAMPLE	MS	MSD
	Prep Date	NA	NA	NA
	Analysis Date	10/26/2014 12:55	10/26/2014 13:13	10/26/2014 13:30
	Matrix	Water	Water	Water

EPA 300.0		Units Result	mg/L MDL	Spike Added	Result	%R	Control Limits %R	Spike Added	Result	%R	RPD	RPD Limit
Sulfate	14808-79-8	51.7	2.50	125	172	96	82 - 110	125	172	96	0	15

Analytical Batch	Client ID	MWQ-24	MWQ-24-ms	MWQ-24-sd
543758	GCAL ID	21410220515	21410220516	21410220517
	Sample Type	SAMPLE	MS	MSD
	Prep Date	NA	NA	NA
	Analysis Date	10/27/2014 02:25	10/27/2014 02:43	10/27/2014 03:00
	Matrix	Water	Water	Water

EPA 300.0		Units Result	mg/L MDL	Spike Added	Result	%R	Control Limits %R	Spike Added	Result	%R	RPD	RPD Limit
Chloride	16887-00-6	5.39	0.250	12.5	18.0	101	79 - 109	12.5	18.0	101	0	15

Analytical Batch	Client ID	MB543691	LCS543691
543691	GCAL ID	1373501	1373502
	Sample Type	MB	LCS
	Prep Date	NA	NA
	Analysis Date	10/24/2014 23:16	10/24/2014 22:59
	Matrix	Water	Water

EPA 300.0		Units Result	mg/L MDL	Spike Added	Result	%R	Control Limits %R
Chloride	16887-00-6	0.050U	0.050	2.50	2.30	92	79 - 109
Sulfate	14808-79-8	0.050U	0.050	2.50	2.37	95	82 - 110

Analytical Batch	Client ID	CH-MW-18	CH-MW-18 MS	CH-MW-18 MSD
543691	GCAL ID	21410165401	21410165402	21410165403
	Sample Type	SAMPLE	MS	MSD
	Prep Date	NA	NA	NA
	Analysis Date	10/25/2014 00:26	10/25/2014 00:43	10/25/2014 01:01
	Matrix	Water	Water	Water

EPA 300.0		Units Result	mg/L MDL	Spike Added	Result	%R	Control Limits %R	Spike Added	Result	%R	RPD	RPD Limit
Sulfate	14808-79-8	627	25.0	1250	1850	98	82 - 110	1250	1840	97	1	15

Analytical Batch	Client ID	MRAA-08S (T)	1369998MS	1369998MSD
543691	GCAL ID	21410145102	1373504	1373505
	Sample Type	SAMPLE	MS	MSD
	Prep Date	NA	NA	NA
	Analysis Date	10/25/2014 10:35	10/25/2014 10:52	10/25/2014 11:10
	Matrix	Water	Water	Water

EPA 300.0		Units Result	mg/L MDL	Spike Added	Result	%R	Control Limits %R	Spike Added	Result	%R	RPD	RPD Limit
Chloride	16887-00-6	997	25.0	1250	2240	99	79 - 109	1250	2240	100	0	15

General Chemistry Quality Control Summary

Analytical Batch 543701	Client ID	MB543701		LCS543701			
	GCAL ID	1373572		1373573			
	Sample Type	MB		LCS			
	Prep Date	NA		NA			
	Analysis Date	10/24/2014 16:45		10/24/2014 16:28			
	Matrix	Water		Water			
EPA 300.0		Units Result	mg/L MDL	Spike Added	Result	%R	Control Limits%R
Chloride	16887-00-6	0.050U	0.050	2.50	2.49	100	79 - 109
Sulfate	14808-79-8	0.050U	0.050	2.50	2.40	96	82 - 110

Analytical Batch 543701	Client ID	MRAA-01M		1371379MS				1371379MSD				
	GCAL ID	21410175202		1373576				1373577				
	Sample Type	SAMPLE		MS				MSD				
	Prep Date	NA		NA				NA				
	Analysis Date	10/25/2014 07:26		10/25/2014 07:43				10/25/2014 08:01				
	Matrix	Water		Water				Water				
EPA 300.0		Units Result	mg/L MDL	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
Sulfate	14808-79-8	0.000	1.00	50.0	48.7	97	82 - 110	50.0	48.3	97	1	15

Analytical Batch 543701	Client ID	MRAA-01S		1371378MS				1371378MSD				
	GCAL ID	21410175201		1373574				1373575				
	Sample Type	SAMPLE		MS				MSD				
	Prep Date	NA		NA				NA				
	Analysis Date	10/24/2014 17:56		10/24/2014 18:14				10/24/2014 18:31				
	Matrix	Water		Water				Water				
EPA 300.0		Units Result	mg/L MDL	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
Chloride	16887-00-6	705	25.0	1250	1980	102	79 - 109	1250	1980	102	0	15

Analytical Batch 543758	Client ID	MB543758		LCS543758			
	GCAL ID	1374034		1374035			
	Sample Type	MB		LCS			
	Prep Date	NA		NA			
	Analysis Date	10/26/2014 10:34		10/26/2014 10:16			
	Matrix	Water		Water			
EPA 300.0		Units Result	mg/L MDL	Spike Added	Result	%R	Control Limits%R
Chloride	16887-00-6	0.050U	0.050	2.50	2.50	100	79 - 109
Sulfate	14808-79-8	0.050U	0.050	2.50	2.46	98	82 - 110

Analytical Batch 543810	Client ID	MB543810		LCS543810			
	GCAL ID	1374193		1374194			
	Sample Type	MB		LCS			
	Prep Date	NA		NA			
	Analysis Date	10/27/2014 12:16		10/27/2014 11:59			
	Matrix	Water		Water			
EPA 300.0		Units Result	mg/L MDL	Spike Added	Result	%R	Control Limits%R
Chloride	16887-00-6	0.050U	0.050	2.50	2.24	90	79 - 109
Sulfate	14808-79-8	0.050U	0.050	2.50	2.32	93	82 - 110

General Chemistry Quality Control Summary

Analytical Batch 543810	Client ID	CSSW-18		CSSW-18 MS				CSSW-18 MSD				
	GCAL ID	21410235019		21410235020				21410235021				
	Sample Type	SAMPLE		MS				MSD				
	Prep Date	NA		NA				NA				
	Analysis Date	10/27/2014 20:41		10/27/2014 20:58				10/27/2014 21:16				
	Matrix	Water		Water				Water				
EPA 300.0		Units Result	mg/L MDL	Spike Added	Result	%R	Control Limits %R	Spike Added	Result	%R	RPD	RPD Limit
Sulfate	14808-79-8	0.270	0.050	2.50	2.54	91	82 - 110	2.50	2.55	91	0	15

Analytical Batch 543530	Client ID	MB543530		LCS543530			
	GCAL ID	1372604		1372605			
	Sample Type	MB		LCS			
	Prep Date	NA		NA			
	Analysis Date	10/22/2014 16:48		10/22/2014 16:46			
	Matrix	Water		Water			
EPA 353.2 Nitrate		Units Result	mg/L-N MDL	Spike Added	Result	%R	Control Limits %R
Nitrate	14797-55-8	0.008U	0.008	0.500	0.521	104	89.5 - 110.5

Analytical Batch 543530	Client ID	BARGE LCP-5 TANK#2		1372618MS				1372618MSD				
	GCAL ID	21410221902		1372623				1372624				
	Sample Type	SAMPLE		MS				MSD				
	Prep Date	NA		NA				NA				
	Analysis Date	10/22/2014 17:14		10/22/2014 17:15				10/22/2014 17:19				
	Matrix	Water		Water				Water				
EPA 353.2 Nitrate		Units Result	mg/L-N MDL	Spike Added	Result	%R	Control Limits %R	Spike Added	Result	%R	RPD	RPD Limit
Nitrate	14797-55-8	0.684	0.410	25.0	23.6	92	89.5 - 110.5	25.0	24.1	94	2	25

Analytical Batch 543625	Client ID	MB543625		LCS543625			
	GCAL ID	1373188		1373189			
	Sample Type	MB		LCS			
	Prep Date	NA		NA			
	Analysis Date	10/23/2014 14:30		10/23/2014 14:29			
	Matrix	Water		Water			
EPA 353.2 Nitrate		Units Result	mg/L-N MDL	Spike Added	Result	%R	Control Limits %R
Nitrate	14797-55-8	0.008U	0.008	0.500	0.462	92	89.5 - 110.5

Analytical Batch 543625	Client ID	M114MW002		1373074MS				1373074MSD				
	GCAL ID	21410220509		1373190				1373191				
	Sample Type	SAMPLE		MS				MSD				
	Prep Date	NA		NA				NA				
	Analysis Date	10/23/2014 14:33		10/23/2014 14:34				10/23/2014 14:35				
	Matrix	Water		Water				Water				
EPA 353.2 Nitrate		Units Result	mg/L-N MDL	Spike Added	Result	%R	Control Limits %R	Spike Added	Result	%R	RPD	RPD Limit
Nitrate	14797-55-8	0.371	0.008	0.500	0.857	97	89.5 - 110.5	0.500	0.856	97	0	25

Analytical Batch 543706	Client ID	MB543706		LCS543706			
	GCAL ID	1373631		1373632			
	Sample Type	MB		LCS			
	Prep Date	NA		NA			
	Analysis Date	10/24/2014 13:27		10/24/2014 13:26			
	Matrix	Water		Water			
EPA 353.2 Nitrate		Units Result	mg/L-N MDL	Spike Added	Result	%R	Control Limits %R
Nitrate	14797-55-8	0.008U	0.008	0.500	0.465	93	89.5 - 110.5

General Chemistry Quality Control Summary

Analytical Batch	Client ID	MWQ-24		MWQ-24-ms				MWQ-24-sd				
543706	GCAL ID	21410220515		21410220516				21410220517				
	Sample Type	SAMPLE		MS				MSD				
	Prep Date	NA		NA				NA				
	Analysis Date	10/24/2014 13:29		10/24/2014 13:31				10/24/2014 13:32				
	Matrix	Water		Water				Water				
EPA 353.2 Nitrate		Units Result	mg/L-N MDL	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
Nitrate	14797-55-8	3.76	0.082	5.00	8.73	99	89.5 - 110.5	5.00	8.62	97	1	25

Analytical Batch	Client ID	MB543529		LCS543529			
543529	GCAL ID	1372600		1372601			
	Sample Type	MB		LCS			
	Prep Date	NA		NA			
	Analysis Date	10/22/2014 17:32		10/22/2014 17:31			
	Matrix	Water		Water			
EPA 353.2 Nitrite		Units Result	mg/L-N MDL	Spike Added	Result	%R	Control Limits%R
Nitrite	14797-65-0	0.006U	0.006	0.500	0.502	100	90 - 110

Analytical Batch	Client ID	BARGE LCP-5 TANK#2		1372618MS				1372618MSD				
543529	GCAL ID	21410221902		1372621				1372622				
	Sample Type	SAMPLE		MS				MSD				
	Prep Date	NA		NA				NA				
	Analysis Date	10/22/2014 17:49		10/22/2014 17:51				10/22/2014 17:52				
	Matrix	Water		Water				Water				
EPA 353.2 Nitrite		Units Result	mg/L-N MDL	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
Nitrite	14797-65-0	3.71	0.300	25.0	30.2	106	90 - 110	25.0	30.5	107	1	25

Analytical Batch	Client ID	MB543624		LCS543624			
543624	GCAL ID	1373184		1373185			
	Sample Type	MB		LCS			
	Prep Date	NA		NA			
	Analysis Date	10/23/2014 14:54		10/23/2014 14:53			
	Matrix	Water		Water			
EPA 353.2 Nitrite		Units Result	mg/L-N MDL	Spike Added	Result	%R	Control Limits%R
Nitrite	14797-65-0	0.006U	0.006	0.500	0.512	102	90 - 110

Analytical Batch	Client ID	M114MW002		1373074MS				1373074MSD				
543624	GCAL ID	21410220509		1373186				1373187				
	Sample Type	SAMPLE		MS				MSD				
	Prep Date	NA		NA				NA				
	Analysis Date	10/23/2014 14:55		10/23/2014 14:57				10/23/2014 14:58				
	Matrix	Water		Water				Water				
EPA 353.2 Nitrite		Units Result	mg/L-N MDL	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
Nitrite	14797-65-0	0.000	0.006	0.500	0.515	103	90 - 110	0.500	0.515	103	0	25

Analytical Batch	Client ID	MB543705		LCS543705			
543705	GCAL ID	1373623		1373624			
	Sample Type	MB		LCS			
	Prep Date	NA		NA			
	Analysis Date	10/24/2014 13:44		10/24/2014 13:43			
	Matrix	Water		Water			
EPA 353.2 Nitrite		Units Result	mg/L-N MDL	Spike Added	Result	%R	Control Limits%R
Nitrite	14797-65-0	0.006U	0.006	0.500	0.505	101	90 - 110

General Chemistry Quality Control Summary

Analytical Batch	Client ID	MWQ-24		MWQ-24-ms				MWQ-24-sd				
543705	GCAL ID	21410220515		21410220516				21410220517				
	Sample Type	SAMPLE		MS				MSD				
	Prep Date	NA		NA				NA				
	Analysis Date	10/24/2014 13:45		10/24/2014 13:46				10/24/2014 13:48				
	Matrix	Water		Water				Water				
EPA 353.2 Nitrite		Units Result	mg/L-N MDL	Spike Added	Result	%R	Control Limits %R	Spike Added	Result	%R	RPD	RPD Limit
Nitrite	14797-65-0	0.000	0.006	0.500	0.514	103	90 - 110	0.500	0.512	102	0	25

Analytical Batch	Client ID	MB543494		LCS543494				LCSHI543494			
543866	GCAL ID	1372450		1372451				1372452			
Prep Batch	Sample Type	MB		LCS				LCSHI			
543494	Prep Date	10/22/2014 10:00		10/22/2014 10:00				10/22/2014 10:00			
Prep Method	Analysis Date	10/27/2014 18:55		10/27/2014 19:07				10/27/2014 18:57			
Cyanide Prep	Matrix	Water		Water				Water			
EPA 9012B		Units Result	mg/L MDL	Spike Added	Result	%R	Control Limits %R	Spike Added	Result	%R	Control Limits %R
Cyanide	57-12-5	0.00050U	0.00050	0.020	0.021	103	80 - 120	0.10	0.088	88	80 - 120

Analytical Batch	Client ID	91088		1370971DUP			1370971MS			
543866	GCAL ID	21410165103		1372454			1372453			
Prep Batch	Sample Type	SAMPLE		DUP			MS			
543494	Prep Date	10/22/2014 10:00		10/22/2014 10:00			10/22/2014 10:00			
Prep Method	Analysis Date	10/27/2014 18:58		10/27/2014 19:00			10/27/2014 18:59			
Cyanide Prep	Matrix	Water		Water			Water			
EPA 9012B		Units Result	mg/L MDL	Result	RPD	RPD Limit	Spike Added	Result	%R	Control Limits %R
Cyanide	57-12-5	0.0036	0.00050	0.0030J	18	20	0.10	0.092	89	80 - 120

Analytical Batch	Client ID	MB543680		LCS543680				LCSHI543680			
543876	GCAL ID	1373476		1373477				1373478			
Prep Batch	Sample Type	MB		LCS				LCSHI			
543680	Prep Date	10/24/2014 10:30		10/24/2014 10:30				10/24/2014 10:30			
Prep Method	Analysis Date	10/28/2014 10:22		10/28/2014 10:23				10/28/2014 10:24			
Cyanide Prep	Matrix	Water		Water				Water			
EPA 9012B		Units Result	mg/L MDL	Spike Added	Result	%R	Control Limits %R	Spike Added	Result	%R	Control Limits %R
Cyanide	57-12-5	0.0041J	0.00050	0.020	0.019	93	80 - 120	0.10	0.093	93	80 - 120

Analytical Batch	Client ID	M114MW002		1373074DUP			1373074MS			
543876	GCAL ID	21410220509		1373480			1373479			
Prep Batch	Sample Type	SAMPLE		DUP			MS			
543680	Prep Date	10/24/2014 10:30		10/24/2014 10:30			10/24/2014 10:30			
Prep Method	Analysis Date	10/28/2014 12:28		10/28/2014 12:30			10/28/2014 12:29			
Cyanide Prep	Matrix	Water		Water			Water			
EPA 9012B		Units Result	mg/L MDL	Result	RPD	RPD Limit	Spike Added	Result	%R	Control Limits %R
Cyanide	57-12-5	0.0013	0.00050	0.0	**200***	20	0.10	0.059	**58***	80 - 120

Analytical Batch	Client ID	MB544446		LCS544446				LCSHI544446			
544506	GCAL ID	1377405		1377406				1377407			
Prep Batch	Sample Type	MB		LCS				LCSHI			
544446	Prep Date	11/05/2014 16:00		11/05/2014 16:00				11/05/2014 16:00			
Prep Method	Analysis Date	11/06/2014 09:48		11/06/2014 09:49				11/06/2014 09:50			
Cyanide Prep	Matrix	Water		Water				Water			
EPA 9012B		Units Result	mg/L MDL	Spike Added	Result	%R	Control Limits %R	Spike Added	Result	%R	Control Limits %R
Cyanide	57-12-5	0.0013J	0.00050	0.020	0.016	81	80 - 120	0.10	0.080	80	80 - 120

General Chemistry Quality Control Summary

Analytical Batch	Client ID	MWQ-24		MWQ-24-ms				MWQ-24-sd				
544506	GCAL ID	21410220515		21410220516				21410220517				
Prep Batch	Sample Type	SAMPLE		MS				MSD				
544446	Prep Date	11/05/2014 16:00		11/05/2014 16:00				11/05/2014 16:00				
Prep Method	Analysis Date	11/06/2014 09:55		11/06/2014 09:56				11/06/2014 09:57				
Cyanide Prep	Matrix	Water		Water				Water				
EPA 9012B		Units Result	mg/L MDL	Spike Added	Result	%R	Control Limits %R	Spike Added	Result	%R	RPD	RPD Limit
Cyanide	57-12-5	0.0014	0.00050	0.10	0.089	87	80 - 120	0.10	0.089	87	0	20

Analytical Batch	Client ID	MB543633		LCS543633			
543633	GCAL ID	1373237		1373238			
	Sample Type	MB		LCS			
	Prep Date	NA		NA			
	Analysis Date	10/23/2014 16:22		10/23/2014 16:22			
	Matrix	Water		Water			
SM 2540 C-2011		Units Result	mg/L MDL	Spike Added	Result	%R	Control Limits %R
Total Dissolved Solids(TDS)	WET-035	10.0U	10.0	1000	1010	101	80 - 120

Analytical Batch	Client ID	M114MW004		1373080DUP		
543633	GCAL ID	21410220512		1373240		
	Sample Type	SAMPLE		DUP		
	Prep Date	NA		NA		
	Analysis Date	10/23/2014 16:22		10/23/2014 16:22		
	Matrix	Water		Water		
SM 2540 C-2011		Units Result	mg/L MDL	Result	RPD	RPD Limit
Total Dissolved Solids(TDS)	WET-035	8940	10.0	9190	3	5.4

Analytical Batch	Client ID	MB543840		LCS543840			
543840	GCAL ID	1374337		1374338			
	Sample Type	MB		LCS			
	Prep Date	NA		NA			
	Analysis Date	10/27/2014 14:22		10/27/2014 14:22			
	Matrix	Water		Water			
SM 2540 C-2011		Units Result	mg/L MDL	Spike Added	Result	%R	Control Limits %R
Total Dissolved Solids(TDS)	WET-035	10.0U	10.0	1000	1040	104	80 - 120

Analytical Batch	Client ID	MWQ-24		MWQ-24-a		
543840	GCAL ID	21410220515		21410220518		
	Sample Type	SAMPLE		DUP		
	Prep Date	NA		NA		
	Analysis Date	10/27/2014 14:22		10/27/2014 14:22		
	Matrix	Water		Water		
SM 2540 C-2011		Units Result	mg/L MDL	Result	RPD	RPD Limit
Total Dissolved Solids(TDS)	WET-035	344	10.0	432	23*	5.4

214102205 560

GCAL ANALYTICAL LABORATORIES, LLC

LACHAT STANDARD IDs

Date: 10-22-14
Analyst: JEM 543529 543530
HBN: 543529 / ~~543530~~ / 543530
Batch: 13172 / 13173 / 13174

Secondary Reviewer/Date: RJO 10/23/14

Test:	NO3	NO2
Calibration Standard Lot:	2121736	2122337
Calibration Std. Exp:	1-30-15	2-28-15
Calibration ID:	1012-23-2	1012-30-3
Calibration Date:	9-26-14	10-2-14
Calibration Exp:	1-30-15	2-28-15

Note: Calibration expires 6 months from calibration date or on the calibration standard expiration date, whichever is sooner, with the exception of chloride. The calibration for chloride expires 1 year from calibration date or on the calibration standard expiration date, whichever is sooner.

CHLORIDE - SM 4500-Cl E-2011 / EPA 9251

CCV (LCS) Standard ID _____
ICV Standard ID _____
0.5M Ferric Nitrate Lot/Exp. _____
Mercuric Thiocyanate Lot/Exp. _____
Color Reagent Lot/Exp. _____

CYANIDE - EPA 335.4 / SM 4500-Cn G-2011 / EPA 9012B

CCV Standard ID _____
ICV Standard ID _____
Phosphate Buffer Lot/Exp. _____
Chloramine T Lot/Exp. _____
Pyridine Lot/Exp. _____
0.25N NaOH Lot/Exp. _____
Prep Batch HBN _____

N+N/NITRATE/NITRITE - EPA 353.2

N+N:
CCV (LCS) Standard ID 1012-45-8
ICV Standard ID NA
Nitrite (NO_2):
CCV (LCS) Standard ID 1012-45-9
ICV Standard ID NA
Reagents:
Ammonium Chloride Buffer Lot/Exp. 1012-41-9
Sulfanilamide Color Reagent Lot/Exp. 1012-22-10
Sodium Thiosulfate 0.025N Lot/Exp. NA
Calculations:
$NO_3 = N+N - NO_2$
Column Efficiency = (LCS N+N*100) / LCS NO_2 (must be 90-110%)
Column Efficiency 100%

pH check and adjustment (if necessary):
Reagent used for pH adjustment: HCl or NH_4OH
HCl Concentrated Lot/Exp. 2122251/4-19-17
~~NH_4OH~~ Concentrated Lot/Exp. 2121502/6-30-18
Initial and final pH for each sample recorded on Batch Sheet

NaOH
RJO 10/23/14

PHENOLICS - EPA 420.4 / EPA 9066

CCV Standard ID _____
ICV Standard ID _____
Phenol Buffer Lot/Exp. _____
4-Aminoantipyrine Lot/Exp. _____
Prep Batch HBN _____

PHOSPHORUS - EPA 365.1

CCV Standard ID _____
ICV Standard ID _____
Ascorbic Acid Lot/Exp. _____
0.11N H_2SO_4 Lot/Exp. _____
Molybdate Color Lot/Exp. _____
Prep Batch HBN _____

214102205 561

Author: WET

Date : 10/22/2014

Original Run Filename: OM_10-22-2014_16-46-13.OMN created 10/22/2014 16:46:13
Original Run Author's Signature: [WET]
Current Run Filename: OM_10-22-2014_16-46-13.OMN last modified 10/22/2014 17:25:37
Current Run Author's Signature: [WET]
Description: Default New Run

Sample	Rep.	Channel 1 NITRATE/NITRITE~C-005 (mg/L)	Detection Time	MDF	
1372597 LCS NO3	1	✓ 0.5210	10/22/2014@16:46:54		104%
Known Conc:		0.5000			
1372596 MB	1	✓ 0.0006	10/22/2014@16:48:09		
Known Conc:		0.0000			
Calibration:		Table/Fig. 1			
NO2	1	0.5230	10/22/2014@16:49:24		105%
21410143702	1	RR 2.0314	10/22/2014@16:50:39	2.00	Rerun
21410154101	1	✓ 0.3286	10/22/2014@16:51:54		
21410212601	1	✓ 1.8284	10/22/2014@16:53:09	50.00	
21410214202	1	RR 4.4719	10/22/2014@16:54:24	2.00	Rerun
21410211301	1	✓ 55.8030	10/22/2014@16:55:38	200.00	
1372598 MS	1	✓ 145.9451	10/22/2014@16:56:52	200.00	90%
1372599 MSD	1	✓ 146.3683	10/22/2014@16:58:07	200.00	91%
21410220801	1	✓ 0.0123	10/22/2014@16:59:21	10.00	
21410212701	1	✓ 1.6850	10/22/2014@17:00:35	50.00	167%
CCV	1	✓ 0.5342	10/22/2014@17:01:49		
Known Conc:		0.5000			
CCB	1	✓ -0.0046	10/22/2014@17:03:03		
Known Conc:		0.0000			
21410220501	1	✓ 0.4668	10/22/2014@17:04:16		
21410220504	1	✓ 0.8114	10/22/2014@17:05:31	2.00	
21410220505	1	✓ 0.8345	10/22/2014@17:06:47	2.00	
21410220503	1	✓ 0.2891	10/22/2014@17:08:02		
21410220507	1	✓ 0.2223	10/22/2014@17:09:17		
21410221101	1	✓ 1.5718	10/22/2014@17:10:31	50.00	
21410221102	1	✓ 1.3065	10/22/2014@17:11:47	50.00	
21410221901	1	✓ 4.2084	10/22/2014@17:13:01	50.00	
21410221902	1	✓ 4.3948	10/22/2014@17:14:16	50.00	
1372623 MS	1	✓ 27.2777	10/22/2014@17:15:30	50.00	92%
CCV	1	✓ 0.5290	10/22/2014@17:16:45		106%
Known Conc:		0.5000			
CCB	1	✓ -0.0031	10/22/2014@17:17:59		
Known Conc:		0.0000			
1372624 MSD	1	✓ 27.8354	10/22/2014@17:19:13	50.00	94%
21410143702	1	✓ 2.0167	10/22/2014@17:20:27	5.00	
21410214202	1	✓ 4.5425	10/22/2014@17:21:41	5.00	
CCV	1	✓ 0.5176	10/22/2014@17:22:55		104%
Known Conc:		0.5000			
CCB	1	✓ -0.0031	10/22/2014@17:24:10		
Known Conc:		0.0000			

Table 1: NITRATE/NITRITE~C-005

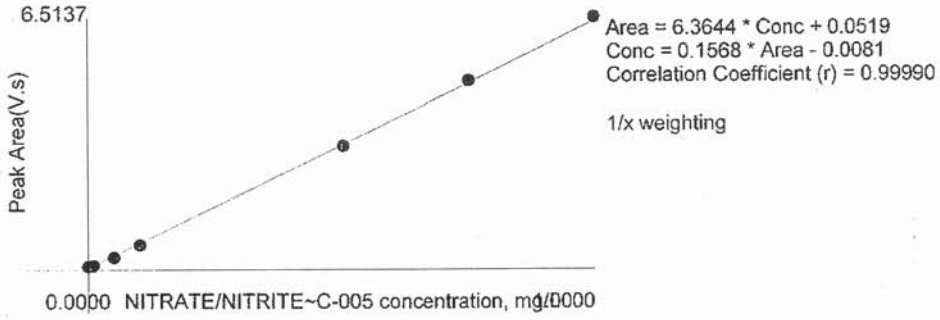
	Conc. (mg/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	1.0000	1	6.5137	0.5493	-1.5	09/26/2014	13:49:42
2	0.7500	1	4.8844	0.4137	-1.2	09/26/2014	13:50:57
3	0.5000	1	3.1968	0.2690	1.2	09/26/2014	13:52:12
4	0.1000	1	0.6353	0.0534	7.7	09/26/2014	13:53:26
5	0.0500	1	0.3183	0.0260	14.0	09/26/2014	13:54:40
6	0.0100	1	0.1011	0.0061	12.5	09/26/2014	13:55:54
7	0.0000	1	0.0809	0.0054		09/26/2014	13:57:09

214102205 562

Author: WET

Date : 10/22/2014

Figure 1: NITRATE/NITRITE~C-005



214102205 563

Author: WET

Date : 10/22/2014

Original Run Filename: OM_10-22-2014_17-30-38.OMN created 10/22/2014 17:30:38
Original Run Author's Signature: [WET]
Current Run Filename: OM_10-22-2014_17-30-38.OMN last modified 10/22/2014 17:58:37
Current Run Author's Signature: [WET]
Description: Default New Run

Sample	Rep.	Channel 1 Nitrite~14797-65-0 (mg/L)	Detection Time	MDF	
1372601 LCS	1	✓ 0.5019	10/22/2014@17:31:18		100%
Known Conc:		0.5000			
Calibration:		Table/Fig. 1			
1372600 mB	1	✓ 0.0011	10/22/2014@17:32:33		
Known Conc:		0.0000			
21410212701	1	✓ 0.0657	10/22/2014@17:33:49		
21410211301	1	✓ 0.3147	10/22/2014@17:35:04		
1372602 mS	1	✓ 0.8271	10/22/2014@17:36:19		102%
1372603 mSD	1	✓ 0.8351	10/22/2014@17:37:33		104%
21410220501	1	✓ 0.0084	10/22/2014@17:38:48		
21410220504	1	✓ -0.0036	10/22/2014@17:40:02		
21410220505	1	✓ -0.0004	10/22/2014@17:41:16		
21410220503	1	✓ -0.0037	10/22/2014@17:42:31		
21410220507	1	✓ -0.0044	10/22/2014@17:43:45		
21410221104	1	✓ 0.0144	10/22/2014@17:44:59		
CCV	1	✓ 0.5008	10/22/2014@17:46:12		100%
Known Conc:		0.5000			
CCB	1	✓ 0.0028	10/22/2014@17:47:26		
Known Conc:		0.0000			
21410221901	1	✓ 3.7437	10/22/2014@17:48:40	50.00	
21410221902	1	✓ 3.7113	10/22/2014@17:49:55	50.00	
1372621 mS	1	✓ 30.2053	10/22/2014@17:51:10	50.00	106%
1372622 mSD	1	✓ 30.5192	10/22/2014@17:52:26	50.00	107%
21410221101	1	0.1128	10/22/2014@17:53:41		
21410221102	1	0.0531	10/22/2014@17:54:55		
CCV	1	✓ 0.5089	10/22/2014@17:56:10		102%
Known Conc:		0.5000			
CCB	1	✓ 0.0048	10/22/2014@17:57:25		
Known Conc:		0.0000			

Table 1: Nitrite~14797-65-0

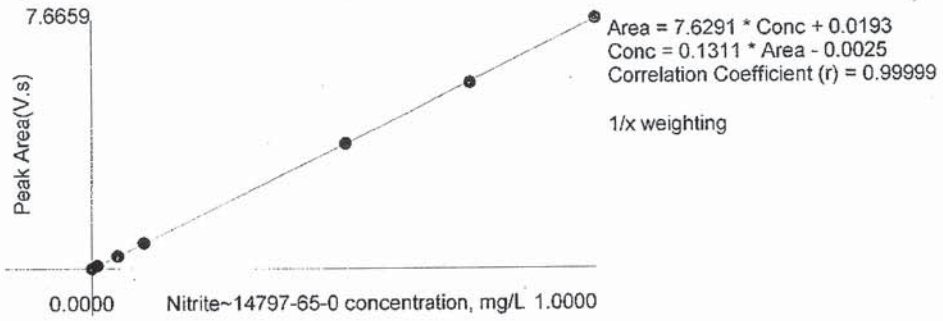
	Conc. (mg/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	1.0000	1	7.6659	0.7285	-0.2	10/02/2014	16:24:53
2	0.7500	1	5.6997	0.5429	0.7	10/02/2014	16:26:08
3	0.5000	1	3.8403	0.3613	-0.2	10/02/2014	16:27:23
4	0.1000	1	0.7935	0.0729	-1.4	10/02/2014	16:28:37
5	0.0500	1	0.3996	0.0357	0.3	10/02/2014	16:29:51
6	0.0100	1	0.1030	0.0079	-7.7	10/02/2014	16:31:05
7	0.0000	1	0.0113	0.0003		10/02/2014	16:32:20

214102205 564

Author: WET

Date : 10/22/2014

Figure 1: Nitrite~14797-65-0



214102205 565

GCAL ANALYTICAL LABORATORIES, LLC

LACHAT STANDARD IDs

Date: 10-23-14
Analyst: JEM
HBN: 543625 / 543624
Batch: 13176 / 13175

Secondary Reviewer/Date: RJO 10/24/14

Test: NO3 / NO2

Calibration Standard Lot:	2121736	212237
Calibration Std. Exp:	1-30-15	2-28-15
Calibration ID:	1012-23-2	1012-30-3
Calibration Date:	9-26-14	10-2-14
Calibration Exp:	1-30-15	2-28-15

Note: Calibration expires 6 months from calibration date or on the calibration standard expiration date, whichever is sooner, with the exception of chloride. The calibration for chloride expires 1 year from calibration date or on the calibration standard expiration date, whichever is sooner.

CHLORIDE - SM 4500-Cl E-2011 / EPA 9251

CCV (LCS) Standard ID	
ICV Standard ID	
0.5M Ferric Nitrate Lot/Exp.	
Mercuric Thiocyanate Lot/Exp.	
Color Reagent Lot/Exp.	

CYANIDE - EPA 335.4 / SM 4500-Cn G-2011 / EPA 9012B

CCV Standard ID	
ICV Standard ID	
Phosphate Buffer Lot/Exp.	
Chloramine T Lot/Exp.	
Pyridine Lot/Exp.	
0.25N NaOH Lot/Exp.	
Prep Batch HBN	

N+N/NITRATE/NITRITE - EPA 353.2

N+N:	
CCV (LCS) Standard ID	1012-46-8
ICV Standard ID	NA
Nitrite (NO_2):	
CCV (LCS) Standard ID	1012-46-9
ICV Standard ID	NA
Reagents:	
Ammonium Chloride Buffer Lot/Exp.	1012-41-9
Sulfanilamide Color Reagent Lot/Exp.	1012-22-10
Sodium Thiosulfate 0.025N Lot/Exp.	NA
Calculations:	

$NO_3 = N+N - NO_2$

Column Efficiency = (LCS N+N*100) / LCS NO_2 (must be 90-110%)

Column Efficiency 101%

pH check and adjustment (if necessary):

Reagent used for pH adjustment: HCl or NH_4OH

HCl Concentrated Lot/Exp.	2122251
NH_4OH Concentrated Lot/Exp.	2121502

Initial and final pH for each sample recorded on Batch Sheet

PHENOLICS - EPA 420.4 / EPA 9066

CCV Standard ID	
ICV Standard ID	
Phenol Buffer Lot/Exp.	
4-Aminoantipyrine Lot/Exp.	
Prep Batch HBN	

PHOSPHORUS - EPA 365.1

CCV Standard ID	I
ICV Standard ID	
Ascorbic Acid Lot/Exp.	
0.11N H2SO4 Lot/Exp.	
Molybdate Color Lot/Exp.	
Prep Batch HBN	

214102205 566

Author: WET

Date : 10/23/2014

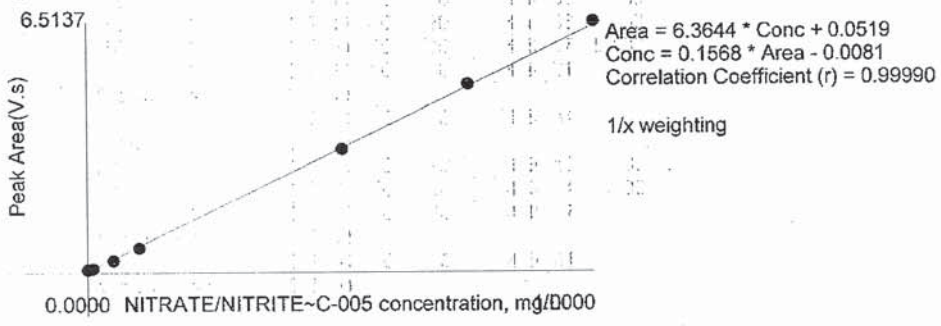
Original Run Filename: OM_10-23-2014_14-28-44.OMN created 10/23/2014 14:28:44
Original Run Author's Signature: [WET]
Current Run Filename: OM_10-23-2014_14-28-44.OMN last modified 10/23/2014 14:51:58
Current Run Author's Signature: [WET]
Description: Default New Run

Sample	Rep.	Channel 1 NITRATE/NITRITE~C-005 (mg/L)	Detection Time	MDF	
1373189 LCS	1	✓ 0.4619	10/23/2014@14:29:26		92%
Known Conc:		0.5000			
Calibration:		Table/Fig. 1			
1373188 MB	1	✓ -0.0071	10/23/2014@14:30:41		
Known Conc:		0.0000			
LCS NO2	1	0.4595	10/23/2014@14:31:57		92%
21410220509	1	✓ 0.3714	10/23/2014@14:33:12		
1373190 MS	1	✓ 0.8568	10/23/2014@14:34:26		97%
1373191 MSD	1	✓ 0.8558	10/23/2014@14:35:41		97%
21410220512	1	✓ 0.8567	10/23/2014@14:36:56		
21410220511	1	✓ 1.0907	10/23/2014@14:38:10		
21410220514	1	RR 1.2904	10/23/2014@14:39:25		
21410231701	1	✓ 1.4665	10/23/2014@14:40:39	50.00	
21410231702	1	✓ 1.5130	10/23/2014@14:41:53	50.00	
21410231703	1	✓ 1.5510	10/23/2014@14:43:07	50.00	
CCV	1	✓ 0.4696	10/23/2014@14:44:21		94%
Known Conc:		0.5000			
CCB	1	✓ -0.0073	10/23/2014@14:45:34		
Known Conc:		0.0000			
21410220511	1	✓ 1.0815	10/23/2014@14:46:48	2.00	
21410220514	1	✓ 1.2597	10/23/2014@14:48:04	2.00	
CCV	1	✓ 0.4677	10/23/2014@14:49:17		94%
Known Conc:		0.5000			
CCB	1	✓ -0.0078	10/23/2014@14:50:31		
Known Conc:		0.0000			

Table 1: NITRATE/NITRITE~C-005

	Conc. (mg/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	1.0000	1	6.5137	0.5493	-1.5	09/26/2014	13:49:42
2	0.7500	1	4.8844	0.4137	-1.2	09/26/2014	13:50:57
3	0.5000	1	3.1968	0.2690	1.2	09/26/2014	13:52:12
4	0.1000	1	0.6353	0.0534	7.7	09/26/2014	13:53:26
5	0.0500	1	0.3183	0.0260	14.0	09/26/2014	13:54:40
6	0.0100	1	0.1011	0.0061	12.5	09/26/2014	13:55:54
7	0.0000	1	0.0809	0.0054		09/26/2014	13:57:09

Figure 1: NITRATE/NITRITE~C-005



214102205 567

Author: WET

Date : 10/23/2014

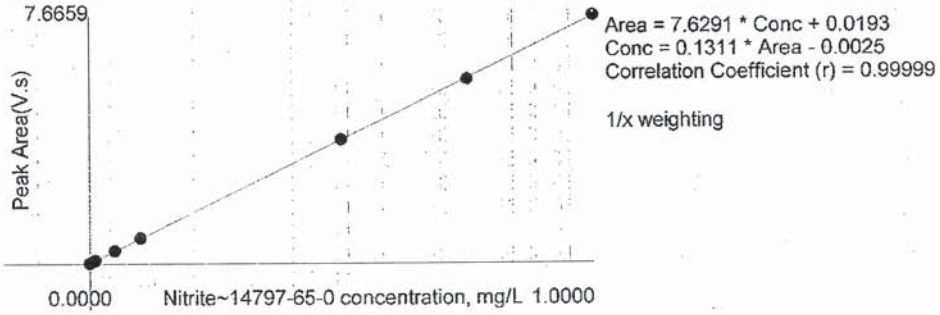
Original Run Filename: OM_10-23-2014_14-52-45.OMN created 10/23/2014 14:52:45
Original Run Author's Signature: [WET]
Current Run Filename: OM_10-23-2014_14-52-45.OMN last modified 10/23/2014 15:09:33
Current Run Author's Signature: [WET]
Description: Default New Run

Sample	Rep.	Channel 1 Nitrite~14797-65-0 (mg/L)	Detection Time	MDF	
1373185 LCS	1	✓ 0.5119	10/23/2014@14:53:26		102%
Known Conc:		0.5000			
Calibration:		Table/Fig. 1			
1373184 MB	1	✓ -0.0016	10/23/2014@14:54:42		
Known Conc:		0.0000			
21410220509	1	✓ -0.0076	10/23/2014@14:55:57		
1373186 MS	1	✓ 0.5147	10/23/2014@14:57:11		103%
1373187 MSD	1	✓ 0.5148	10/23/2014@14:58:26		103%
21410220512	1	✓ -0.0081	10/23/2014@14:59:41		
21410220511	1	✓ -0.0083	10/23/2014@15:00:56		
21410220514	1	✓ -0.0080	10/23/2014@15:02:11		
21410231701	1	0.0930	10/23/2014@15:03:25		
21410231702	1	0.0594	10/23/2014@15:04:39		
21410231703	1	✓ 0.0554	10/23/2014@15:05:53		
CCV	1	✓ 0.5130	10/23/2014@15:07:07		103%
Known Conc:		0.5000			
CCB	1	✓ -0.0080	10/23/2014@15:08:21		
Known Conc:		0.0000			

Table 1: Nitrite~14797-65-0

	Conc. (mg/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	1.0000	1	7.6659	0.7285	-0.2	10/02/2014	16:24:53
2	0.7500	1	5.6997	0.5429	0.7	10/02/2014	16:26:08
3	0.5000	1	3.8403	0.3613	-0.2	10/02/2014	16:27:23
4	0.1000	1	0.7935	0.0729	-1.4	10/02/2014	16:28:37
5	0.0500	1	0.3996	0.0357	0.3	10/02/2014	16:29:51
6	0.0100	1	0.1030	0.0079	-7.7	10/02/2014	16:31:05
7	0.0000	1	0.0113	0.0003		10/02/2014	16:32:20

Figure 1: Nitrite~14797-65-0



214102205 569

GCAL ANALYTICAL LABORATORIES, LLC

LACHAT STANDARD IDs

Date: 10/24/14
Analyst: DMT
HBN: 543706/ 543705
Batch: 13178 / 13177

Secondary Reviewer/Date: JEM 10-27-14

Test:	N+N	NO_3	NO_2
Calibration Standard Lot:	2121736		212 2337
Calibration Std. Exp:	1/30/15		2/28/15
Calibration ID:	1012-23-2		1012-30-3
Calibration Date:	9/26/14		10/2/14
Calibration Exp:	1/30/15		2/28/15

Note: Calibration expires 6 months from calibration date or on the calibration standard expiration date, whichever is sooner, with the exception of chloride. The calibration for chloride expires 1 year from calibration date or on the calibration standard expiration date, whichever is sooner.

CHLORIDE - SM 4500-Cl E-2011 / EPA 9251

CCV (LCS) Standard ID _____
ICV Standard ID _____
0.5M Ferric Nitrate Lot/Exp. _____
Mercuric Thiocyanate Lot/Exp. _____
Color Reagent Lot/Exp. _____

N+N/NITRATE/NITRITE - EPA 353.2

N+N:
CCV (LCS) Standard ID 1012-47-3
ICV Standard ID NA
Nitrite (NO_2):
CCV (LCS) Standard ID 1012-47-4
ICV Standard ID NA
Reagents:
Ammonium Chloride Buffer Lot/Exp. 1012-41-9/2-16-15
Sulfanilamide Color Reagent Lot/Exp. 1012-22-10/3-26-15
Sodium Thiosulfate 0.025N Lot/Exp. NA
Calculations:
$NO_3 = N+N - NO_2$
Column Efficiency = (LCS N+N*100) / LCS NO_2 (must be 90-110%)
Column Efficiency 95%

pH check and adjustment (if necessary):
Reagent used for pH adjustment: HCl or NH_4OH
HCl Concentrated Lot/Exp. NA
NH_4OH Concentrated Lot/Exp. ↓
Initial and final pH for each sample recorded on Batch Sheet

CYANIDE - EPA 335.4 / SM 4500-Cn G-2011 / EPA 9012B

CCV Standard ID _____
ICV Standard ID _____
Phosphate Buffer Lot/Exp. _____
Chloramine T Lot/Exp. _____
Pyridine Lot/Exp. _____
0.25N NaOH Lot/Exp. _____
Prep Batch HBN _____

PHENOLICS - EPA 420.4 / EPA 9066

CCV Standard ID _____
ICV Standard ID _____
Phenol Buffer Lot/Exp. _____
4-Aminoantipyrine Lot/Exp. _____
Prep Batch HBN _____

PHOSPHORUS - EPA 365.1

CCV Standard ID 1
ICV Standard ID _____
Ascorbic Acid Lot/Exp. _____
0.11N H2SO4 Lot/Exp. _____
Molybdate Color Lot/Exp. _____
Prep Batch HBN _____

Author: WET

Date : 10/24/2014

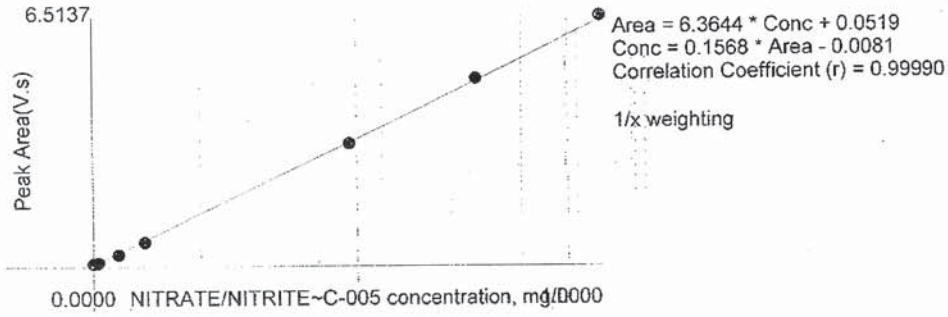
Original Run Filename: OM_10-24-2014_13-25-33.OMN created 10/24/2014 13:25:33
Original Run Author's Signature: [WET]
Current Run Filename: OM_10-24-2014_13-25-33.OMN last modified 10/24/2014 13:41:23
Current Run Author's Signature: [WET]
Description: Default New Run

Sample	Rep.	Channel 1 NITRATE/NITRITE~C-005 (mg/L)	Detection Time	MDF	
1373632	1	0.4650	10/24/2014@13:26:14		93
Known Conc:		0.5000			
Calibration:		Table/Fig. 1			
1373631	1	-0.0122	10/24/2014@13:27:29		
Known Conc:		0.0000			
NO2 LCS	1	0.4908	10/24/2014@13:28:44		
21410220515	1	3.7596	10/24/2014@13:29:59	10.00	
21410220516 MS	1	8.7331	10/24/2014@13:31:14	10.00	99
21410220517 MSD	1	8.6182	10/24/2014@13:32:29	10.00	97
21410220520	1	3.5618	10/24/2014@13:33:43	5.00	
21410240501	1	2.1377	10/24/2014@13:34:58	20.00	
21410240502	1	1.7656	10/24/2014@13:36:12	20.00	
21410240503	1	2.2988	10/24/2014@13:37:27	20.00	
CCV	1	0.4700	10/24/2014@13:38:42		94
Known Conc:		0.5000			
CCB	1	-0.0118	10/24/2014@13:39:57		
Known Conc:		0.0000			

Table 1: NITRATE/NITRITE~C-005

	Conc. (mg/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	1.0000	1	6.5137	0.5493	-1.5	09/26/2014	13:49:42
2	0.7500	1	4.8844	0.4137	-1.2	09/26/2014	13:50:57
3	0.5000	1	3.1968	0.2690	1.2	09/26/2014	13:52:12
4	0.1000	1	0.6353	0.0534	7.7	09/26/2014	13:53:26
5	0.0500	1	0.3183	0.0260	14.0	09/26/2014	13:54:40
6	0.0100	1	0.1011	0.0061	12.5	09/26/2014	13:55:54
7	0.0000	1	0.0809	0.0054		09/26/2014	13:57:09

Figure 1: NITRATE/NITRITE~C-005



214102205 570

Author: WET

Date : 10/24/2014

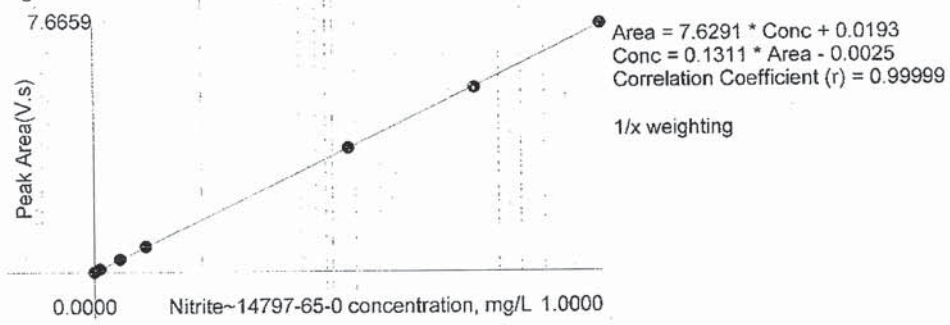
Original Run Filename: OM_10-24-2014_13-42-32.OMN created 10/24/2014 13:42:32
Original Run Author's Signature: [WET]
Current Run Filename: OM_10-24-2014_13-42-32.OMN last modified 10/24/2014 13:56:54
Current Run Author's Signature: [WET]
Description: Default New Run

Sample	Rep.	Channel 1 Nitrite~14797-65-0 (mg/L)	Detection Time	MDF	
1373624	1	0.5053	10/24/2014@13:43:13		101
Known Conc:		0.5000			
Calibration:		Table/Fig. 1			
1373623	1	-0.0018	10/24/2014@13:44:28		
Known Conc:		0.0000			
21410220515	1	-0.0018	10/24/2014@13:45:44		
21410220516 MS	1	0.5140	10/24/2014@13:46:58		103
21410220517 MSD	1	0.5123	10/24/2014@13:48:13		102
21410220520	1	-0.0065	10/24/2014@13:49:28		
21410240501	1	0.0638	10/24/2014@13:50:43		
21410240502	1	0.1242	10/24/2014@13:51:57		
21410240503	1	0.0889	10/24/2014@13:53:11		
CCV	1	0.5082	10/24/2014@13:54:27		102
Known Conc:		0.5000			
CCB	1	-0.0043	10/24/2014@13:55:42		
Known Conc:		0.0000			

Table 1: Nitrite~14797-65-0

	Conc. (mg/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	1.0000	1	7.6659	0.7285	-0.2	10/02/2014	16:24:53
2	0.7500	1	5.6997	0.5429	0.7	10/02/2014	16:26:08
3	0.5000	1	3.8403	0.3613	-0.2	10/02/2014	16:27:23
4	0.1000	1	0.7935	0.0729	-1.4	10/02/2014	16:28:37
5	0.0500	1	0.3996	0.0357	0.3	10/02/2014	16:29:51
6	0.0100	1	0.1030	0.0079	-7.7	10/02/2014	16:31:05
7	0.0000	1	0.0113	0.0003		10/02/2014	16:32:20

Figure 1: Nitrite~14797-65-0



214102205 571

GCAL ANALYTICAL LABORATORIES, LLC

IC STANDARD IDs

Date: 10/24/14
Analyst: DMT / RXJ
HBN: 543601 / 543691
Batch: 4599 / 4600
Secondary Reviewer/Date: ROM for RJO 10/27/14

Instrument ID: IC3

ANIONS – EPA 300.0 / EPA 9056A

Calibration Standard (F, Cl, Br, SO_4) Lot #: 2122345 Expiration Date: 9/30/15
Calibration Standard (NO_2) Lot #: 2122337 Expiration Date: 2/28/15
Calibration Standard (NO_3) Lot #: 2121736 Expiration Date: 1/30/15
Calibration ID 1012-38-1
Calibration Date 10/10/14
Calibration Expiration 1/30/15 (6 months from calibration date or on the earliest expiration date of each calibration standard, whichever is sooner)
CCV/LCS (F, Cl, Br, SO_4, NO_2, NO3) Working Standard ID 1012-47-5
ICV (F, Cl, Br, SO_4, NO_2, NO3) Working Standard ID NA
Eluent Lot #: ~~1012-47-5~~ 46-10 Expiration Date: 4/23/15
DMT 10/25/14

VOLATILE FATTY ACIDS – GCAL SOP WL-070

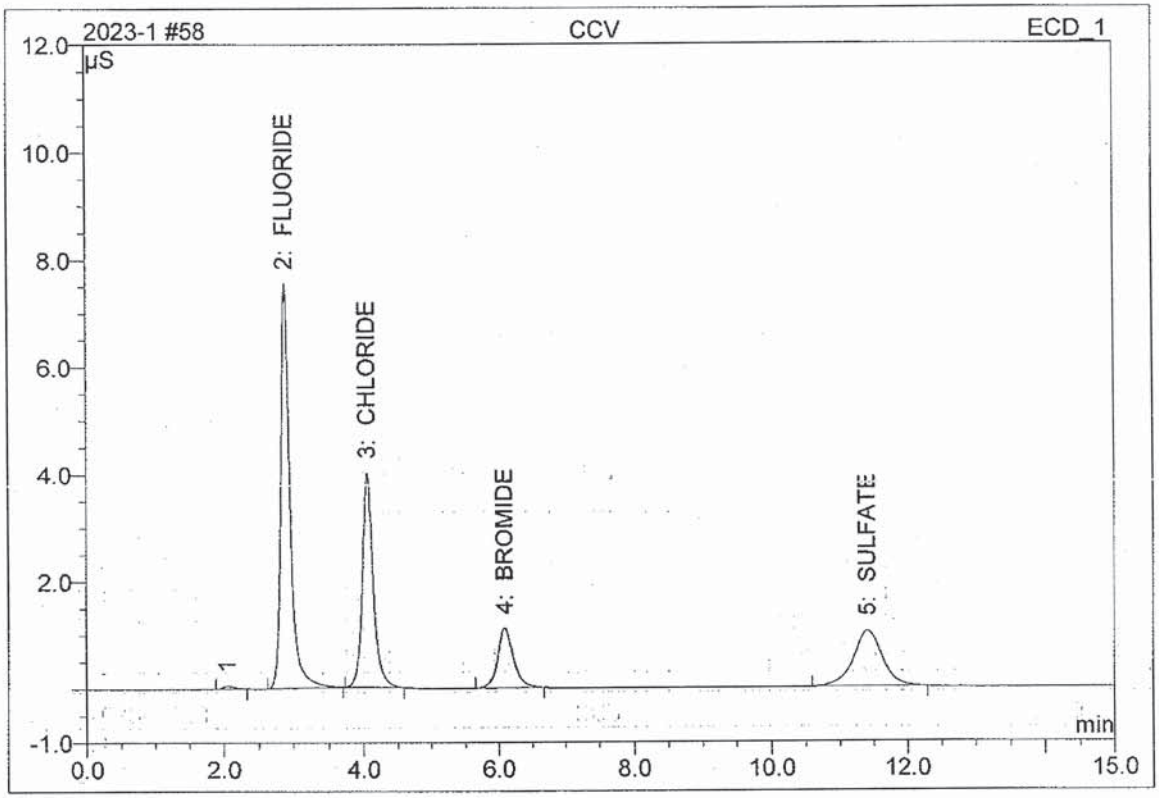
Calibration Standard (Acetic Acid) Lot #: _____ Expiration Date: _____
Calibration Standard (Butyric Acid) Lot #: _____ Expiration Date: _____
Calibration Standard (Formic Acid) Lot #: _____ Expiration Date: _____
Calibration Standard (Lactic Acid) Lot #: _____ Expiration Date: _____
Calibration Standard (Propionic Acid) Lot #: _____ Expiration Date: _____
Calibration Standard (Pyruvic Acid) Lot #: _____ Expiration Date: _____
Calibration ID _____
Calibration Date _____
Calibration Expiration _____ (1 year from calibration date or on the earliest expiration date of each calibration standard, whichever is sooner)
CCV/LCS Working Standard ID _____
ICV Working Standard ID _____
Eluent Lot #: _____ Expiration Date: _____

PERCHLORATE – EPA 314.0

Calibration Standard Lot #: _____ Expiration Date: _____
Calibration ID _____
Calibration Date _____
Calibration Expiration _____ (6 months from calibration date or on the earliest expiration date of each calibration standard, whichever is sooner)
CCV/LCS Working Standard ID _____
ICV Working Standard ID _____
Eluent Lot #: _____ Expiration Date: _____

Sample Analysis Report

Sample Name:	CCV	**Sample No.:**	58
Sequence Name:	2023-1	**ICAL Date**	n.a.
Program Method:	9056	**Injection vol.:**	50.0
Quantitation Method:	9056	**Dilution Factor:**	1.0000
	10/24/2014 10:24 PM	**System Operator:**	RXJ

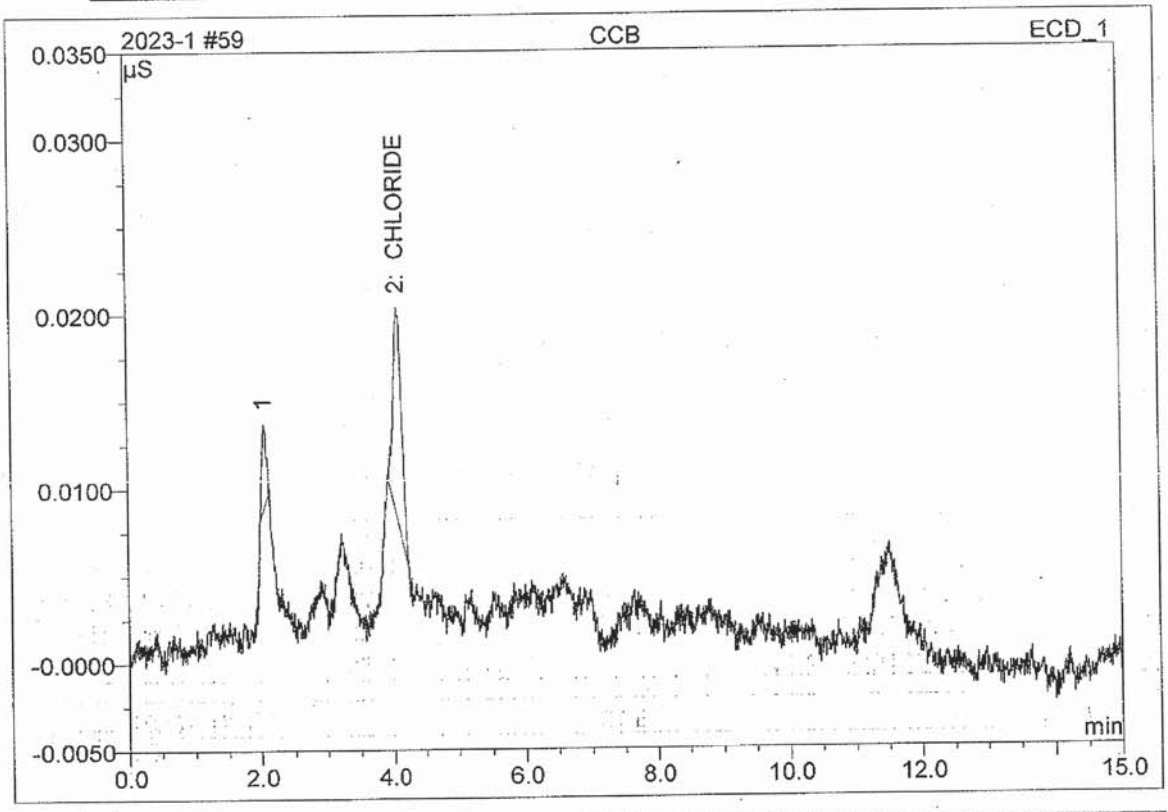


Peak No.	Component Name	Retention Time	Area µS*min	Height µS	Amount mg/L	Amnt Dev (abs) mg/L
2	FLUORIDE	2.90	1.148	7.548	2.371	95
3	CHLORIDE	4.06	0.738	4.000	2.347	94
4	BROMIDE	6.09	0.306	1.116	2.494	100
5	SULFATE	11.41	0.522	1.040	2.405	96

214102205 573

Sample Analysis Report

Sample Name:	CCB	**Sample No.:**	59
Sequence Name:	2023-1	**ICAL Date**	n.a.
Program Method:	9056	**Injection vol.:**	50.0
Quantitation Method:	9056	**Dilution Factor:**	1.0000
	10/24/2014 10:41 PM	**System Operator:**	RXJ

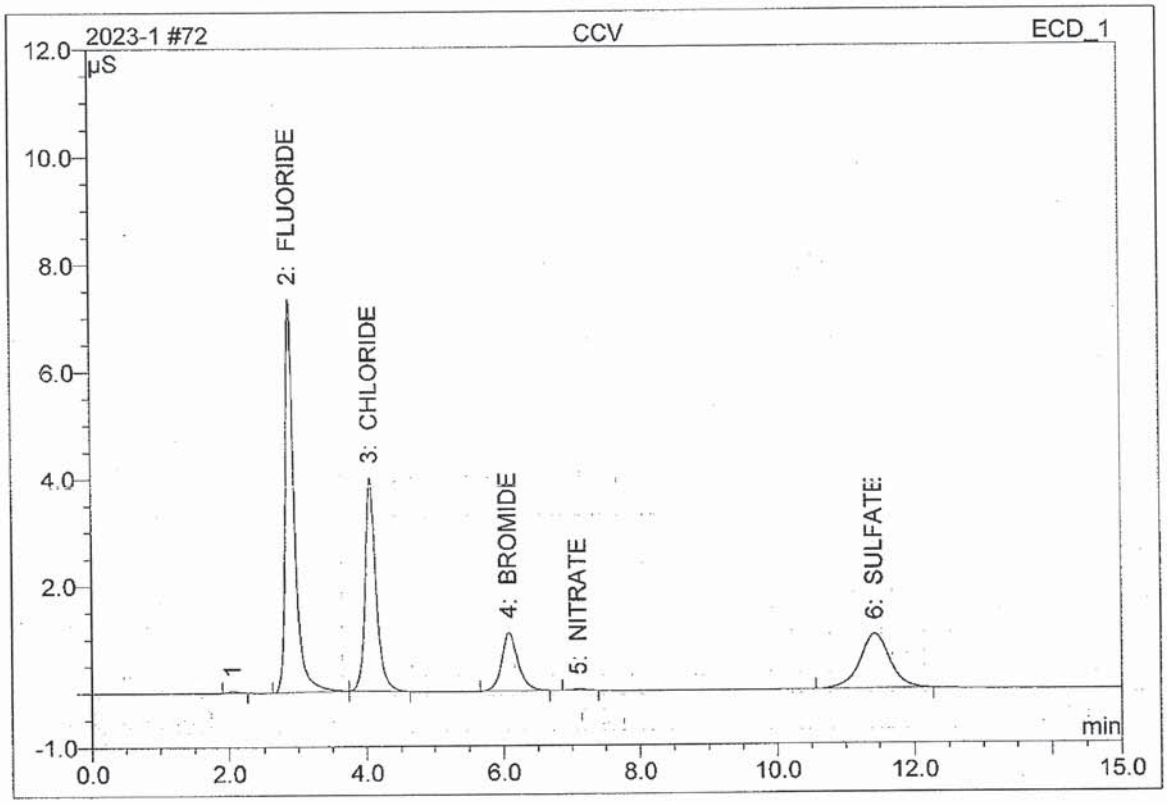


Peak No.	Component Name	Retention Time	Area µS*min	Height µS	Amount mg/L	Amnt.Dev.(abs) mg/L
2	CHLORIDE	4.08	0.002	0.012	0.017	n.a.

214102205 574

Sample Analysis Report

Sample Name:	CCV	**Sample No.:**	72
Sequence Name:	2023-1	**ICAL Date**	n.a.
Program Method:	9056	**Injection vol.:**	50.0
Quantitation Method:	9056	**Dilution Factor:**	1.0000
	10/25/2014 2:28 AM	**System Operator:**	DMT

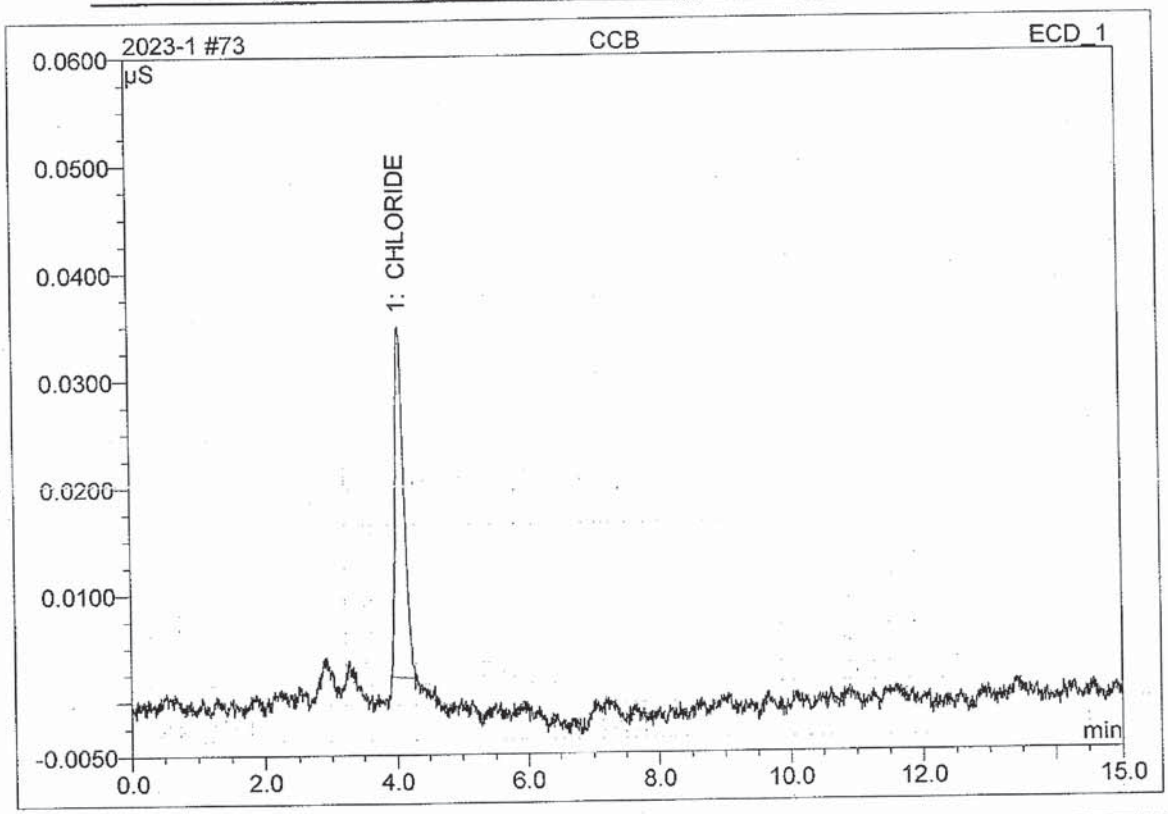


Peak No.	Component Name	Retention Time	Area µS*min	Height µS	Amount mg/L	Amnt Dev (abs) mg/L
2	FLUORIDE	2.90	1.124	7.341	2.323	93
3	CHLORIDE	4.06	0.738	3.977	2.347	94
4	BROMIDE	6.08	0.300	1.091	2.441	98
5	NITRATE	7.10	0.007	0.028	0.098	4
6	SULFATE	11.44	0.513	1.018	2.365	95

214102205 575

Sample Analysis Report

Sample Name:	CCB	**Sample No.:**	73
Sequence Name:	2023-1	**ICAL Date**	n.a.
Program Method:	9056	**Injection vol.:**	50.0
Quantitation Method:	9056	**Dilution Factor:**	1.0000
	10/25/2014 2:45 AM	**System Operator:**	DMT

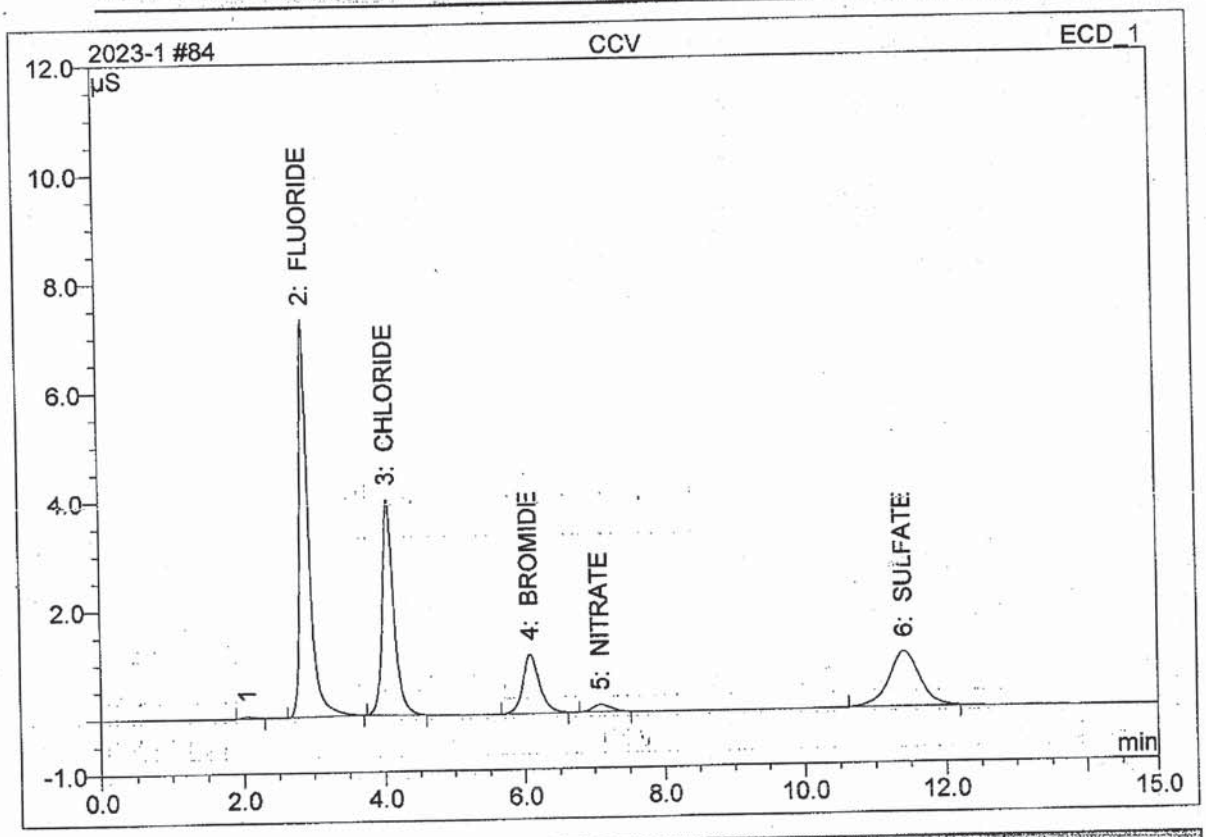


Peak No.	Component Name	Retention Time	Area µS*min	Height µS	Amount mg/L	Amnt Dev.(abs) mg/L
1	CHLORIDE	4.07	0.005	0.033	0.027	n.a.

214102205 576

Sample Analysis Report

Sample Name:	CCV	**Sample No.:**	84
Sequence Name:	2023-1	**ICAL Date**	n.a.
Program Method:	9056	**Injection vol.:**	50.0
Quantitation Method:	9056	**Dilution Factor:**	1.0000
	10/25/2014 5:57 AM	**System Operator:**	DMT

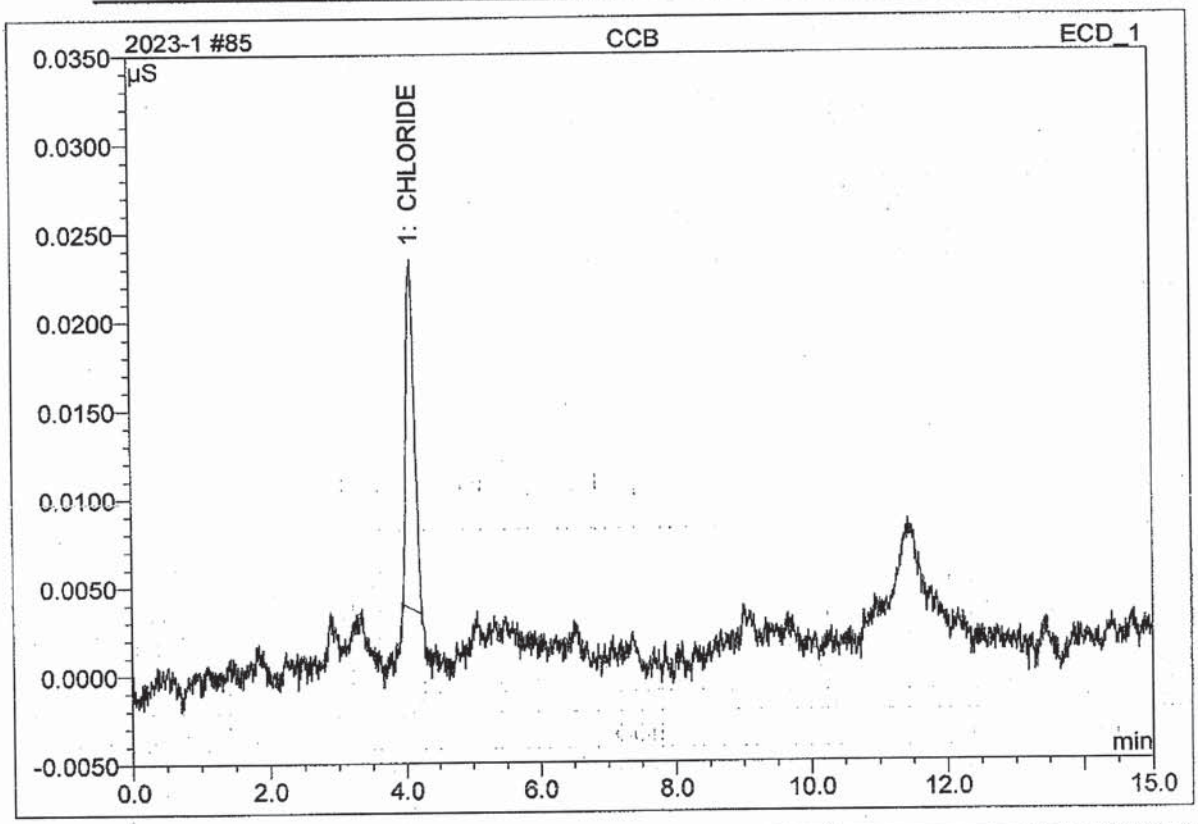


Peak No.	Component Name	Retention Time	Area µS*min	Height µS	Amount mg/L	Amnt Dev.(abs) mg/L
2	FLUORIDE	2.89	1.120	7.308	2.316	93
3	CHLORIDE	4.06	0.736	3.952	2.341	94
4	BROMIDE	6.08	0.301	1.093	2.456	98
5	NITRATE	7.09	0.040	0.131	0.138	6
6	SULFATE	11.42	0.511	1.011	2.357	94

214102295 577

Sample Analysis Report

Sample Name:	CCB	**Sample No.:**	85
Sequence Name:	2023-1	**ICAL Date**	n.a.
Program Method:	9056	**Injection vol.:**	50.0
Quantitation Method:	9056	**Dilution Factor:**	1.0000
	10/25/2014 6:14 AM	**System Operator:**	DMT



Peak No.	Component Name	Retention Time	Area µS*min	Height µS	Amount mg/L	Amnt Dev (abs) mg/L
1	CHLORIDE	4.09	0.003	0.020	0.020	n.a.

214102205 578

GCAL ANALYTICAL LABORATORIES, LLC

IC STANDARD IDs

Date: 10-28-14
Analyst: JCM
HBN: 543810
Batch: 4606

Instrument ID: IC3

Secondary Reviewer/Date: RBM 10/28/14

ANIONS – EPA 300.0 / EPA 9056A

Calibration Standard (F, Cl, Br, SO_4) Lot #: 2122345 Expiration Date: 9-30-15
Calibration Standard (NO_2) Lot #: 2122337 Expiration Date: 2-28-15
Calibration Standard (NO_3) Lot #: 21217136 Expiration Date: 1-30-15
Calibration ID 1012-38-1
Calibration Date 10-10-14
Calibration Expiration 1-30-15 (6 months from calibration date or on the earliest expiration date of each calibration standard, whichever is sooner)
CCV/LCS (F, Cl, Br, SO_4, NO_2, NO3) Working Standard ID 1012-49-2
ICV (F, Cl, Br, SO_4, NO_2, NO3) Working Standard ID NA
Eluent Lot #: 1012-46-10 Expiration Date: 4-23-15

VOLATILE FATTY ACIDS – GCAL SOP WL-070

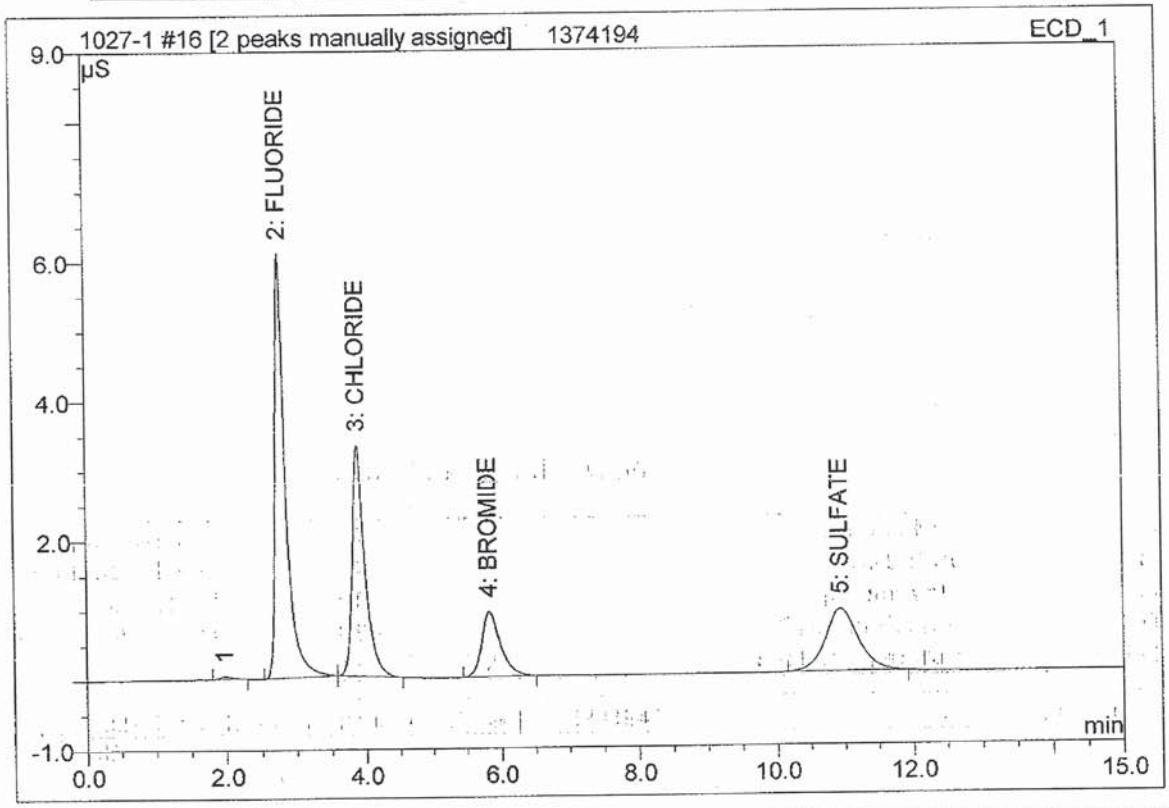
Calibration Standard (Acetic Acid) Lot #: _____ Expiration Date: _____
Calibration Standard (Butyric Acid) Lot #: _____ Expiration Date: _____
Calibration Standard (Formic Acid) Lot #: _____ Expiration Date: _____
Calibration Standard (Lactic Acid) Lot #: _____ Expiration Date: _____
Calibration Standard (Propionic Acid) Lot #: _____ Expiration Date: _____
Calibration Standard (Pyruvic Acid) Lot #: _____ Expiration Date: _____
Calibration ID _____
Calibration Date _____
Calibration Expiration _____ (1 year from calibration date or on the earliest expiration date of each calibration standard, whichever is sooner)
CCV/LCS Working Standard ID _____
ICV Working Standard ID _____
Eluent Lot #: _____ Expiration Date: _____

PERCHLORATE – EPA 314.0

Calibration Standard Lot #: _____ Expiration Date: _____
Calibration ID _____
Calibration Date _____
Calibration Expiration _____ (6 months from calibration date or on the earliest expiration date of each calibration standard, whichever is sooner)
CCV/LCS Working Standard ID _____
ICV Working Standard ID _____
Eluent Lot #: _____ Expiration Date: _____

Sample Analysis Report

Sample Name:	1374194 LCS / CCV	**Sample No.:**	16
Sequence Name:	1027-1	**ICAL Date**	n.a.
Program Method:	9056	**Injection vol.:**	50.0
Quantitation Method:	9056	**Dilution Factor:**	1.0000
	10/27/2014 11:59 AM	**System Operator:**	JEM

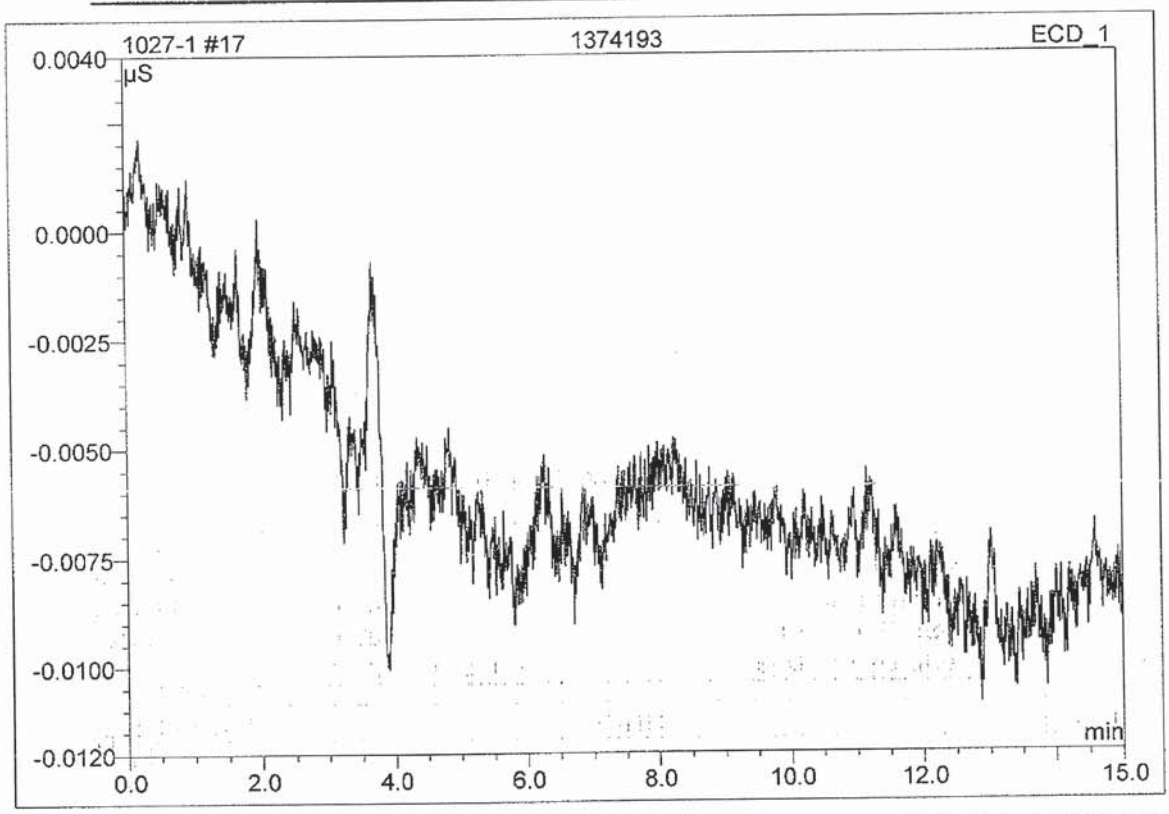


Peak No.	Component Name	Retention Time	Area µS*min	Height µS	Amount mg/L	Amnt.Dev.(abs) mg/L
2	FLUORIDE	2.78	1.073	6.098	2.221	n.a.
3	CHLORIDE	3.89	0.704	3.306	2.239 (90%)	n.a.
4	BROMIDE	5.83	0.296	0.941	2.411 (96%)	n.a.
5	SULFATE	10.94	0.503	0.900	2.323 (93%)	n.a.

214102205 580

Sample Analysis Report

Sample Name:	1374193 MB/LCB	**Sample No.:**	17
Sequence Name:	1027-1	**ICAL Date**	n.a.
Program Method:	9056	**Injection vol.:**	50.0
Quantitation Method:	9056	**Dilution Factor:**	1.0000
	10/27/2014 12:16 PM	**System Operator:**	JEM

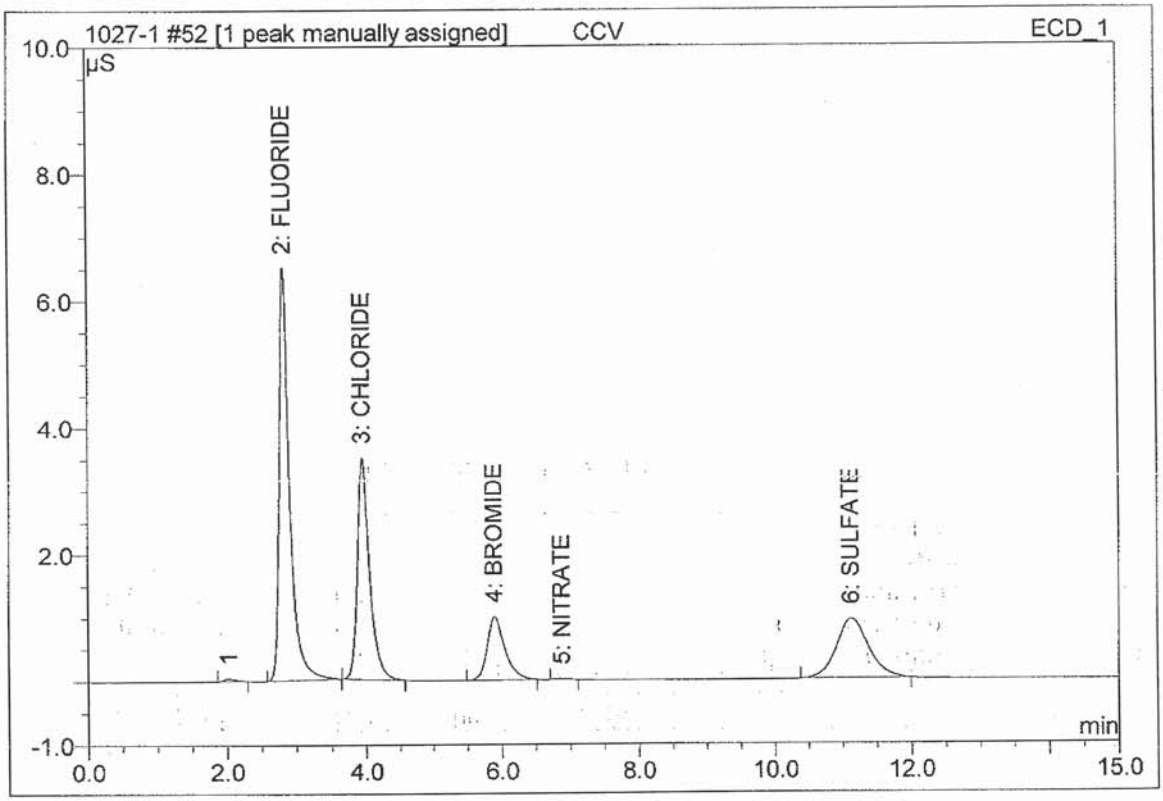


Peak No.	Component Name	Retention Time	Area µS*min	Height µS	Amount mg/L	Amnt.Dev.(abs) mg/L

214102205 581

Sample Analysis Report

Sample Name:	CCV	**Sample No.:**	52
Sequence Name:	1027-1	**ICAL Date**	n.a.
Program Method:	9056	**Injection vol.:**	50.0
Quantitation Method:	9056	**Dilution Factor:**	1.0000
	10/27/2014 10:25 PM	**System Operator:**	JEM



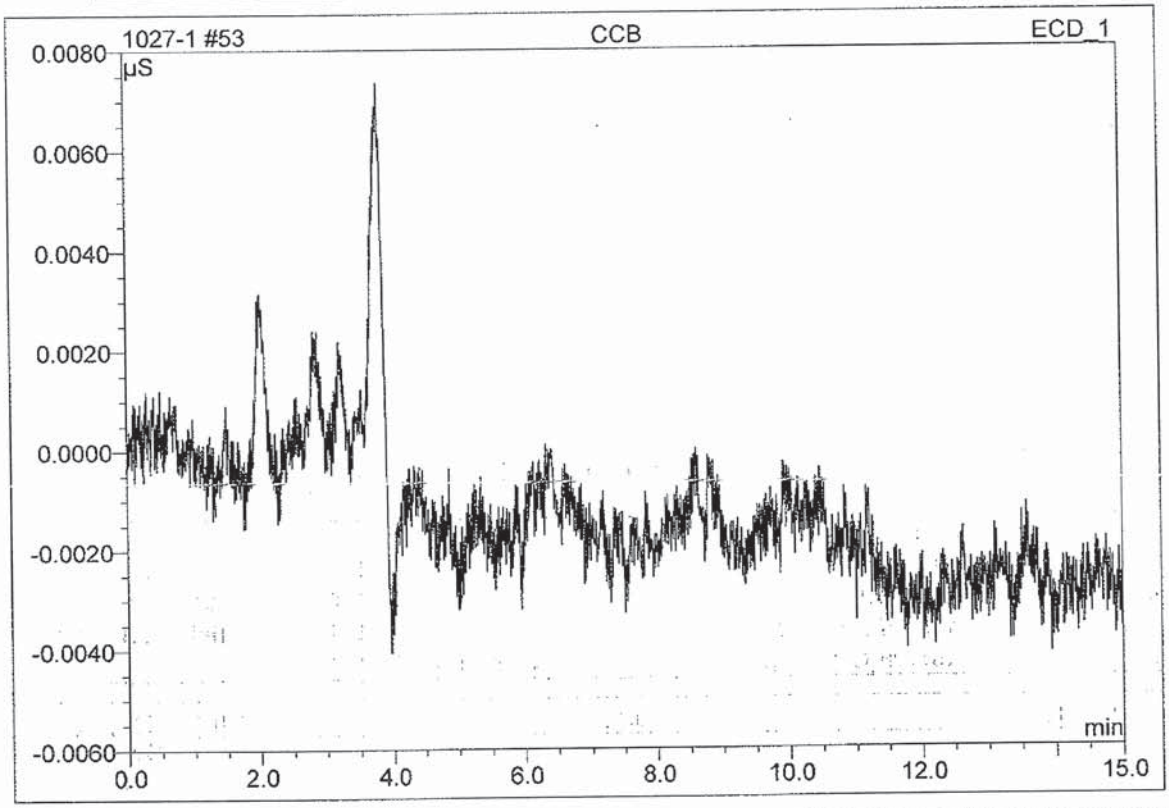
Peak No.	Component Name	Retention Time	Area µS*min	Height µS	Amount mg/L	Amnt.Dev.(abs) mg/L
2	FLUORIDE	2.83	1.114	6.509	2.303	92
3	CHLORIDE	3.95	0.722	3.493	2.298	92
4	BROMIDE	5.89	0.303	1.001	2.470	99
5	NITRATE	6.88	0.004	0.017	0.094	4
6	SULFATE	11.13	0.518	0.943	2.388	96

Sulfate peak not named. JEM 10-28-14

214102205 582

Sample Analysis Report

Sample Name:	CCB	**Sample No.:**	53
Sequence Name:	1027-1	**ICAL Date**	n.a.
Program Method:	9056	**Injection vol.:**	50.0
Quantitation Method:	9056	**Dilution Factor:**	1.0000
	10/27/2014 10:43 PM	**System Operator:**	JEM

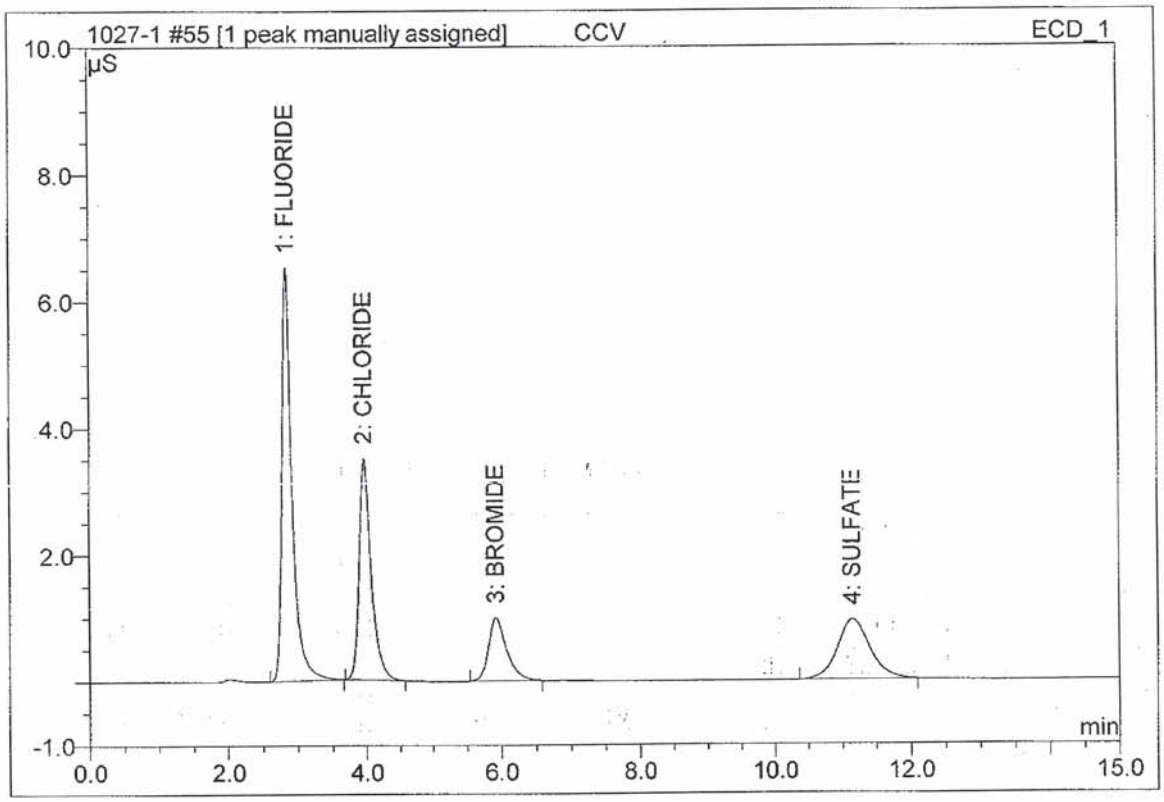


Peak No.	Component Name	Retention Time	Area µS*min	Height µS	Amount mg/L	Amnt.Dev.(abs) mg/L

214102205 583

Sample Analysis Report

Sample Name:	CCV	**Sample No.:**	55
Sequence Name:	1027-1	**ICAL Date**	n.a.
Program Method:	9056	**Injection vol.:**	50.0
Quantitation Method:	9056	**Dilution Factor:**	1.0000
	10/27/2014 11:18 PM	**System Operator:**	JEM



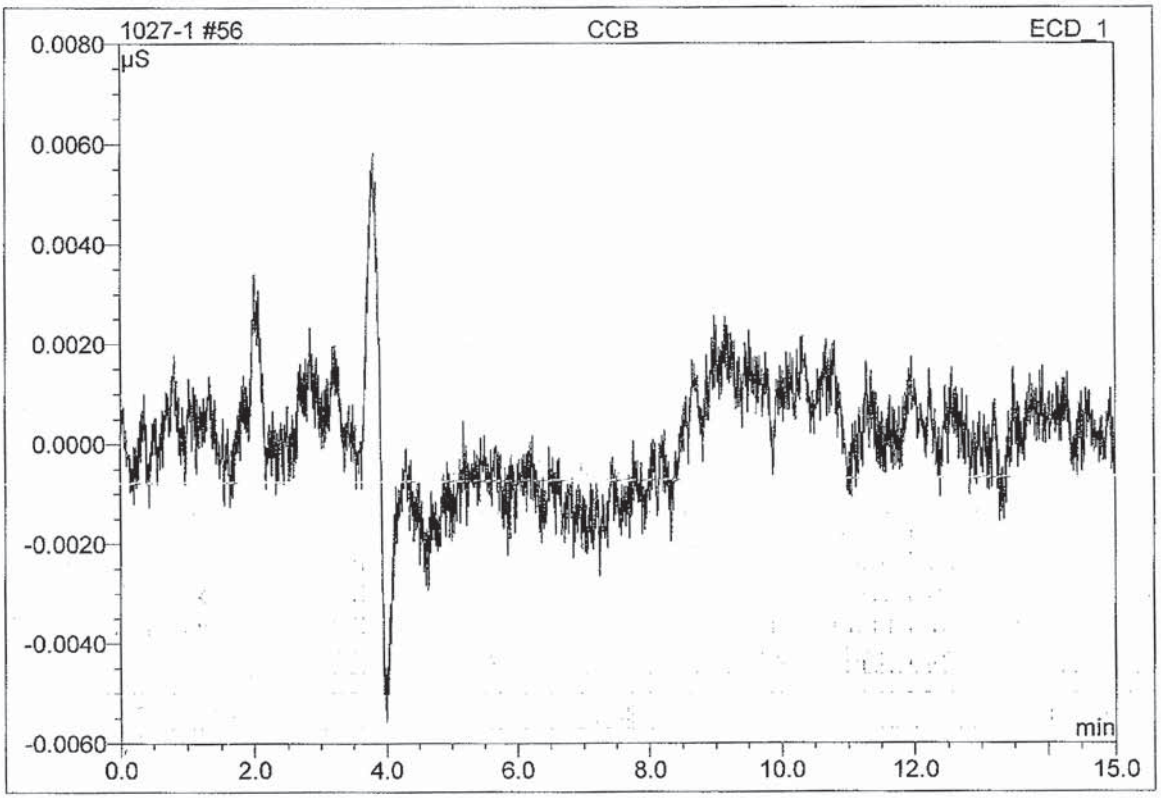
Peak No.	Component Name	Retention Time	Area µS*min	Height µS	Amount mg/L	Amnt.Dev.(abs) mg/L
1	FLUORIDE	2.84	1.119	6.525	2.314	93
2	CHLORIDE	3.97	0.723	3.505	2.299	92
3	BROMIDE	5.92	0.304	1.001	2.476	99
4	SULFATE	11.15	0.520	0.949	2.398	96

Sulfate peak not named. JEM 10-28-14

214102205 584

Sample Analysis Report

Sample Name:	CCB	**Sample No.:**	56
Sequence Name:	1027-1	**ICAL Date**	n.a.
Program Method:	9056	**Injection vol.:**	50.0
Quantitation Method:	9056	**Dilution Factor:**	1.0000
	10/27/2014 11:35 PM	**System Operator:**	JEM



Peak No.	Component Name	Retention Time	Area µS*min	Height µS	Amount mg/L	Amnt Dev.(abs) mg/L

214102205 585

GCAL ANALYTICAL LABORATORIES, LLC

IC STANDARD IDs

Date: 10/10/14
Analyst: DMT
HBN: ICAL
Batch: NA

Instrument ID: IC 3

Secondary Reviewer/Date: RJD 10/15/14

ANIONS – EPA 300.0 / EPA 9056A

Calibration Standard (F, Cl, Br, SO_4) Lot #: 2122345 Expiration Date: 9/30/15
Calibration Standard (NO_2) Lot #: 2122337 Expiration Date: 2/28/15
Calibration Standard (NO_3) Lot #: 2121736 Expiration Date: 1/30/15
Calibration ID 1012-38-1
Calibration Date 10/10/14
Calibration Expiration 1/30/15 (6 months from calibration date or on the earliest expiration date of each calibration standard, whichever is sooner)
CCV/LCS (F, Cl, Br, SO_4, NO_2, NO3) Working Standard ID 1012-38-1
ICV (F, Cl, Br, SO_4, NO_2, NO3) Working Standard ID 1012-38-6
Eluent Lot #: 1012-36-6 Expiration Date: 4/9/15

VOLATILE FATTY ACIDS – GCAL SOP WL-070

Calibration Standard (Acetic Acid) Lot #: _____ Expiration Date: _____
Calibration Standard (Butyric Acid) Lot #: _____ Expiration Date: _____
Calibration Standard (Formic Acid) Lot #: _____ Expiration Date: _____
Calibration Standard (Lactic Acid) Lot #: _____ Expiration Date: _____
Calibration Standard (Propionic Acid) Lot #: _____ Expiration Date: _____
Calibration Standard (Pyruvic Acid) Lot #: _____ Expiration Date: _____
Calibration ID _____
Calibration Date _____
Calibration Expiration _____(1 year from calibration date or on the earliest expiration date of each calibration standard, whichever is sooner)
CCV/LCS Working Standard ID _____
ICV Working Standard ID _____
Eluent Lot #: _____ Expiration Date: _____

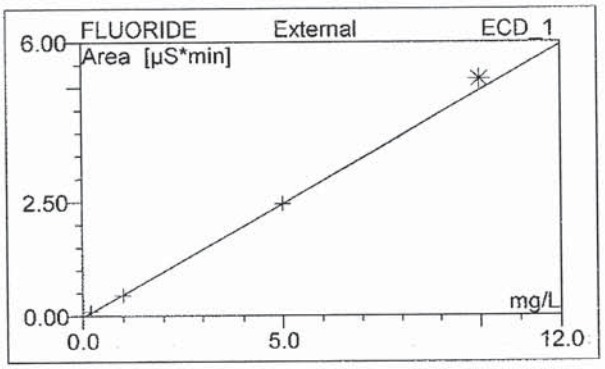
PERCHLORATE – EPA 314.0

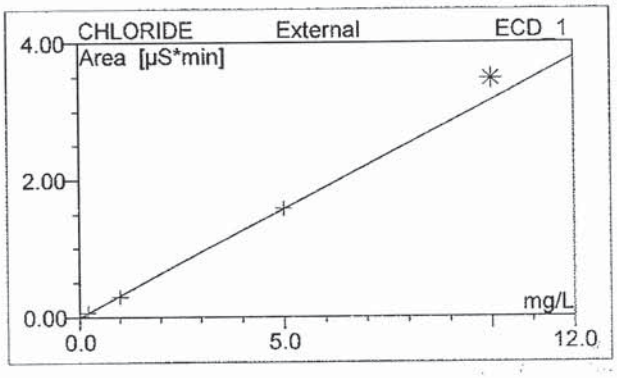
Calibration Standard Lot #: _____ Expiration Date: _____
Calibration ID _____
Calibration Date _____
Calibration Expiration _____(6 months from calibration date or on the earliest expiration date of each calibration standard, whichever is sooner)
CCV/LCS Working Standard ID _____
ICV Working Standard ID _____
Eluent Lot #: _____ Expiration Date: _____

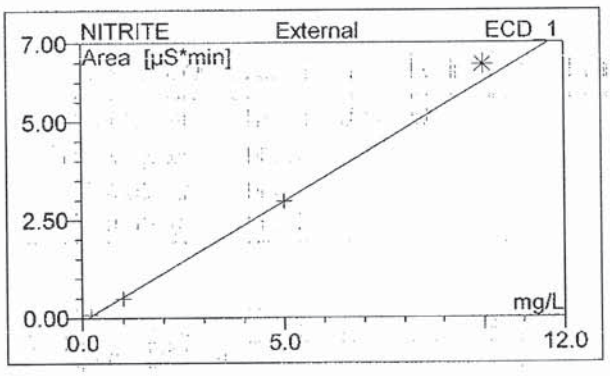
214102205 586

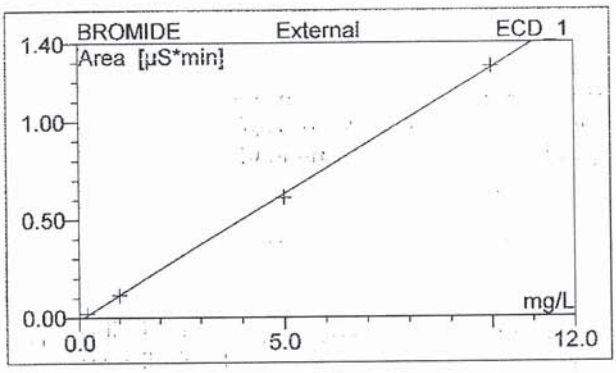
INITIAL CALIBRATION REPORT

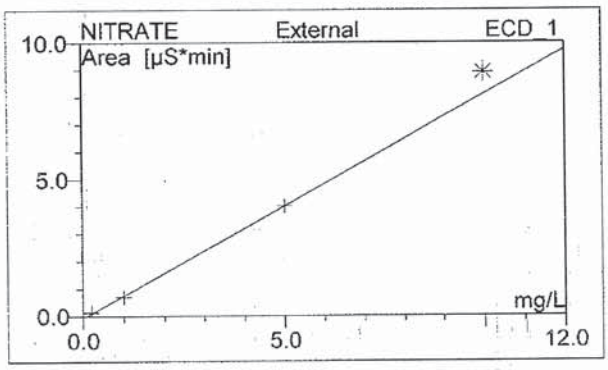
Recording Time:	##########	*Injection Volume:*	**50.0**
Control Program:	**9056**	*Channel:*	**ECD_**
Quantif. Method:	**9056**		
Run Time (min):	**15.00**		

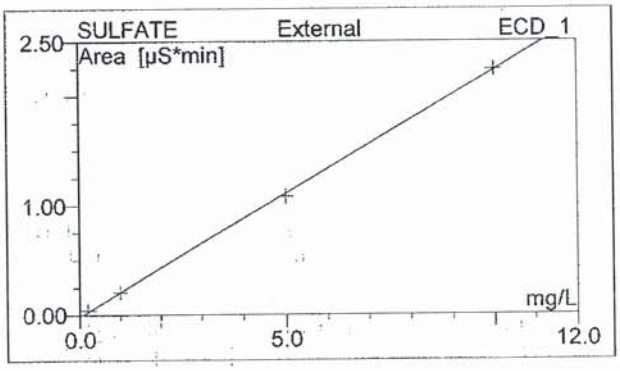












Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

214102205 587

INITIAL CALIBRATION REPORT (Continued)

Recording Time:	##########	*Injection Volume:*	**50.0**
Control Program:	**9056**	*Channel:*	**ECD_'**
Quantif. Method:	**9056**		
Run Time (min):	**15.00**		

No.	Ret.Time min	Peak Name	Cal.Type	Points	Corr.Coeff.	Rel.Std.Dev. %
2	2.95	FLUORIDE	LOff	3	0.99989	2.628
3	4.20	CHLORIDE	LOff	4	0.99978	3.941
4	5.03	NITRITE	LOff	3	0.99971	4.526
5	6.41	BROMIDE	LOff	4	0.99978	2.955
6	7.48	NITRATE	LOff	3	0.99979	3.808
7	12.36	SULFATE	LOff	4	0.99986	2.281

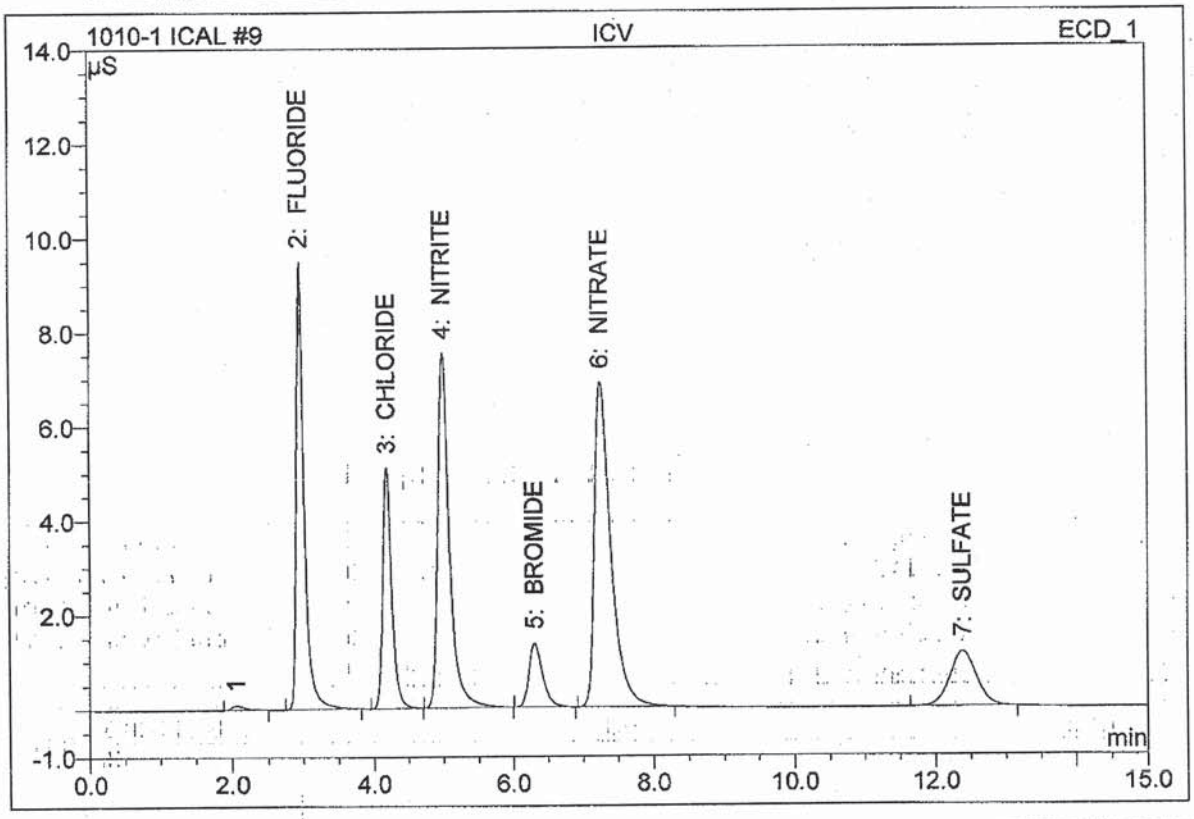
214102205 588

ICAL INST3 10/10/14

No.	Peak Name	Cal.Type	#Points	Rel.Std.Dev %	Corr.Coeff. %	Offset	Slope	Curve
n.a.	FLUORIDE	LOff	3	2.6282	99.9895	-0.0287	0.4962	0
1	CHLORIDE	LOff	4	3.9406	99.9776	-0.0035	0.3159	0
n.a.	NITRITE	LOff	3	4.5264	99.9709	-0.0777	0.6076	0
n.a.	BROMIDE	LOff	4	2.9551	99.9775	-0.0137	0.1283	0
n.a.	NITRATE	LOff	3	3.8078	99.9786	-0.0726	0.8159	0
n.a.	SULFATE	LOff	4	2.2806	99.9865	-0.0187	0.2247	0
Average:			3.5	3.3564	99.9801	-0.0358	0.4314	0

Sample Analysis Report

Sample Name:	ICV	**Sample No.:**	9
Sequence Name:	1010-1 ICAL	**ICAL Date**	n.a.
Program Method:	9056	**Injection vol.:**	50.0
Quantitation Method:	9056	**Dilution Factor:**	1.0000
	10/10/2014 12:25 PM	**System Operator:**	DMT



Peak No.	Component Name	Retention Time	Area µS*min	Height µS	Amount mg/L	Amnt Dev (abs) mg/L
2	FLUORIDE	2.96	1.221	9.494	2.518	101
3	CHLORIDE	4.19	0.764	5.094	2.429	97
4	NITRITE	4.99	1.460	7.515	2.531	101
5	BROMIDE	6.31	0.305	1.344	2.487	99
6	NITRATE	7.25	1.879	6.878	2.392	96
7	SULFATE	12.39	0.515	1.159	2.375	95

214102205 590

GCAL ANALYTICAL LABORATORIES, LLC

IC STANDARD IDs

Date: 10/24/14
Analyst: RXJ
HBN: 543701
Batch: 4601

Instrument ID: IC 1

Secondary Reviewer/Date: RSO 10/28/14

ANIONS – EPA 300.0 / EPA 9056A

Calibration Standard (F, Cl, Br, SO_4) Lot #: 2122345 Expiration Date: 9/30/15
Calibration Standard (NO_2) Lot #: 2122337 Expiration Date: 2/28/15
Calibration Standard (NO_3) Lot #: 2121736 Expiration Date: 1/30/15
Calibration ID 1012-44-6
Calibration Date 10/21/14
Calibration Expiration 1/30/15 (6 months from calibration date or on the earliest expiration date of each calibration standard, whichever is sooner)
CCV/LCS (F, Cl, Br, SO_4, NO_2, NO3) Working Standard ID 1012-47-5
ICV (F, Cl, Br, SO_4, NO_2, NO3) Working Standard ID N/A
Eluent Lot #: 1012-46-11 Expiration Date: 4/24/15

VOLATILE FATTY ACIDS – GCAL SOP WL-070

Calibration Standard (Acetic Acid) Lot #: _____ Expiration Date: _____
Calibration Standard (Butyric Acid) Lot #: _____ Expiration Date: _____
Calibration Standard (Formic Acid) Lot #: _____ Expiration Date: _____
Calibration Standard (Lactic Acid) Lot #: _____ Expiration Date: _____
Calibration Standard (Propionic Acid) Lot #: _____ Expiration Date: _____
Calibration Standard (Pyruvic Acid) Lot #: _____ Expiration Date: _____
Calibration ID _____
Calibration Date _____
Calibration Expiration _____ (1 year from calibration date or on the earliest expiration date of each calibration standard, whichever is sooner)
CCV/LCS Working Standard ID _____
ICV Working Standard ID _____
Eluent Lot #: _____ Expiration Date: _____

PERCHLORATE – EPA 314.0

Calibration Standard Lot #: _____ Expiration Date: _____
Calibration ID _____
Calibration Date _____
Calibration Expiration _____ (6 months from calibration date or on the earliest expiration date of each calibration standard, whichever is sooner)
CCV/LCS Working Standard ID _____
ICV Working Standard ID _____
Eluent Lot #: _____ Expiration Date: _____

Sample Analysis Report

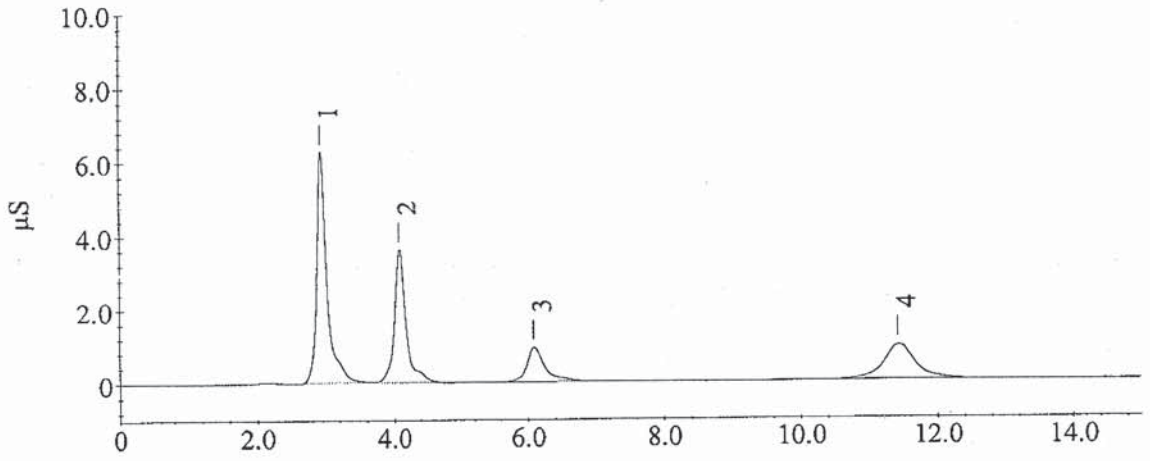
Sample Name : 1373573 LCS/CCV
Data File Name : D:\PEAKNET\DATA\2014\102014\1024_B002.DXD

Method File Name : d:\peaknet\method\dx500lowno3.met
Date Time Collected : 10/24/2014 16:28:20
System Operator : DMT
Dilution Factor : 1.00
Injection Number : 2

Peak Information : All Peaks

Peak #	Component Name	Retention Time	Amount	Peak Area	Peak Height
1	FLUORIDE,16984-48-8	2.93	2.408 96	660862	62179
2	CHLORIDE,16887-00	4.08	2.489 100	445825	35871
3	BROMIDE,24959-67-	6.08	2.388 96	175345	9245
4	SULFATE,14808-79-	11.41	2.401 96	309588	9397

1373573



214102205 592

Sample Analysis Report

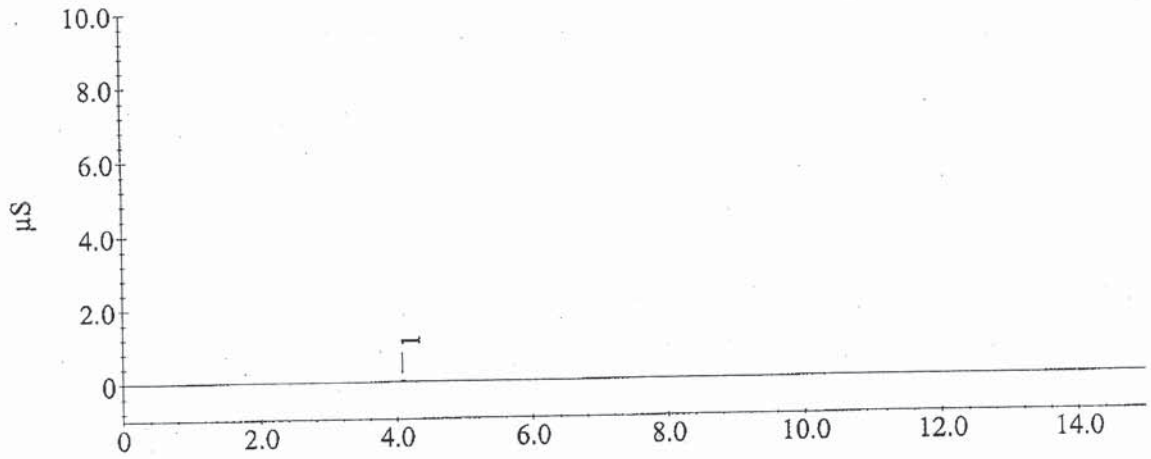
Sample Name : 1373572 MB/CCB
Data File Name : d:\peaknet\data\2014\102014\1024_A003.DXD

Method File Name : d:\peaknet\method\dx500lowno3.met
Date Time Collected : 10/24/2014 16:45:59
System Operator : DMT
Dilution Factor : 1.00
Injection Number : 3

Peak Information : All Peaks

Peak #	Component Name	Retention Time	Amount	Peak Area	Peak Height
1	CHLORIDE,16887-00	4.08	0.009	2218	207

1373572



214102205 593

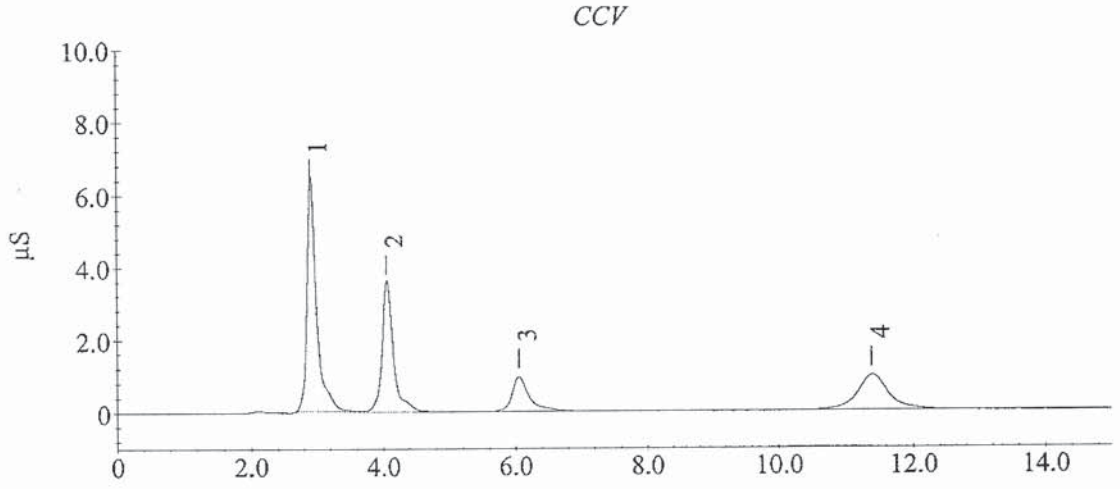
Sample Analysis Report

Sample Name : CCV
Data File Name : d:\peaknet\data\2014\102014\1024_038.DXD

Method File Name : d:\peaknet\method\dx500lowno3.met
Date Time Collected : 10/25/2014 03:02:10
System Operator : DMT
Dilution Factor : 1.00
Injection Number : 38

Peak Information : All Peaks

Peak #	Component Name	Retention Time	Amount	Peak Area	Peak Height
1	FLUORIDE,16984-48-8	2.91	2.42097	664181	61980
2	CHLORIDE,16887-00	4.05	2.43898	436798	35558
3	BROMIDE,24959-67-	6.05	2.40696	176667	9555
4	SULFATE,14808-79-	11.39	2.42097	312167	9625



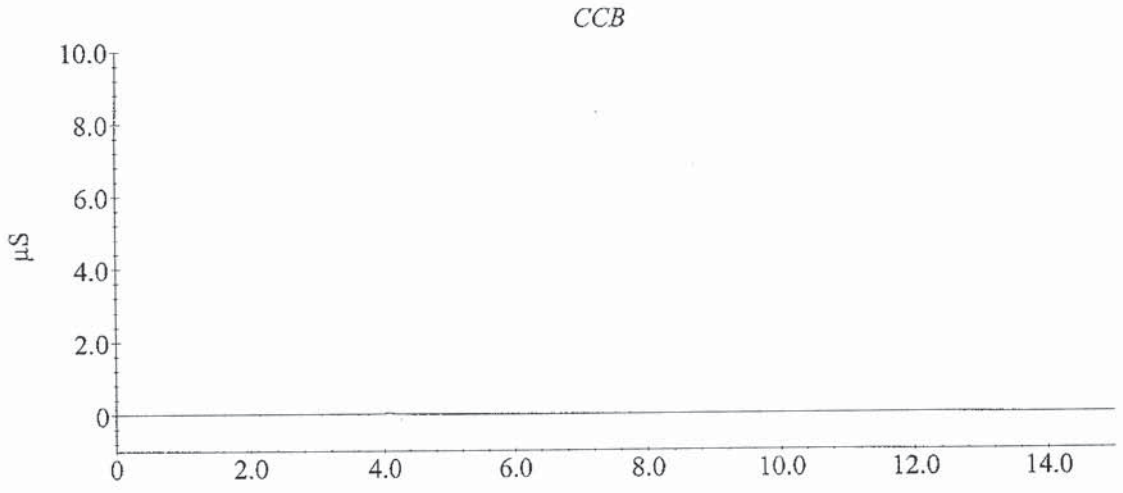
Sample Analysis Report

Sample Name : CCB
Data File Name : d:\peaknet\data\2014\102014\1024_039.DXD

Method File Name : d:\peaknet\method\dx500lowno3.met
Date Time Collected : 10/25/2014 03:19:47
System Operator : DMT
Dilution Factor : 1.00
Injection Number : 39

Peak Information : All Peaks

Peak #	Component Name	Retention Time	Amount	Peak Area	Peak Height



214102205 595

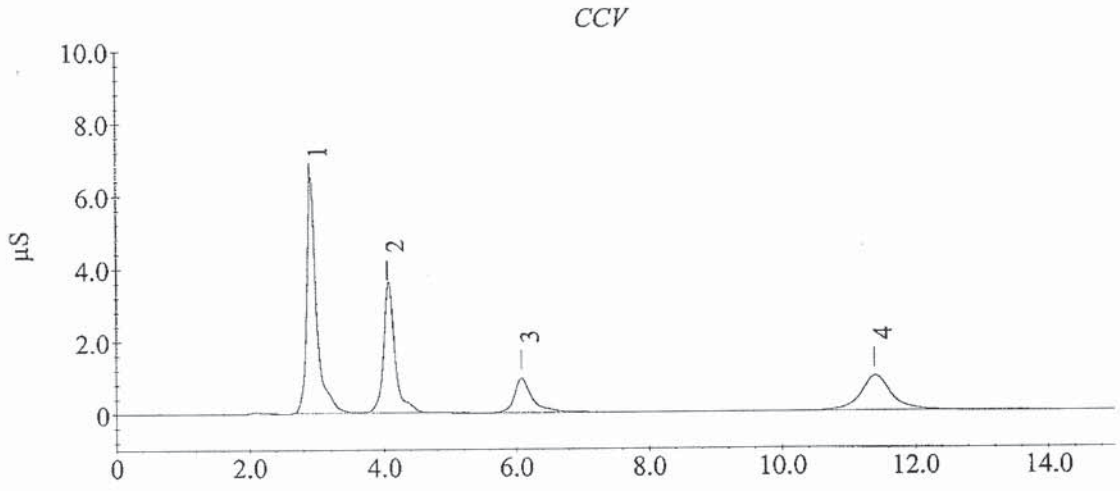
Sample Analysis Report

Sample Name : CCV
Data File Name : d:\peaknet\data\2014\102014\1024_050.DXD

Method File Name : d:\peaknet\method\dx500lowno3.met
Date Time Collected : 10/25/2014 06:33:23
System Operator : DMT
Dilution Factor : 1.00
Injection Number : 50

Peak Information : All Peaks

Peak #	Component Name	Retention Time	Amount	Peak Area	Peak Height
1	FLUORIDE,16984-48-8	2.91	2.438	669393	61109
2	CHLORIDE,16887-00	4.05	2.44798	438440	34415
3	BROMIDE,24959-67-	6.08	2.45288	180239	9582
4	SULFATE,14808-79-	11.39	2.41897	311834	9633



214102205 596

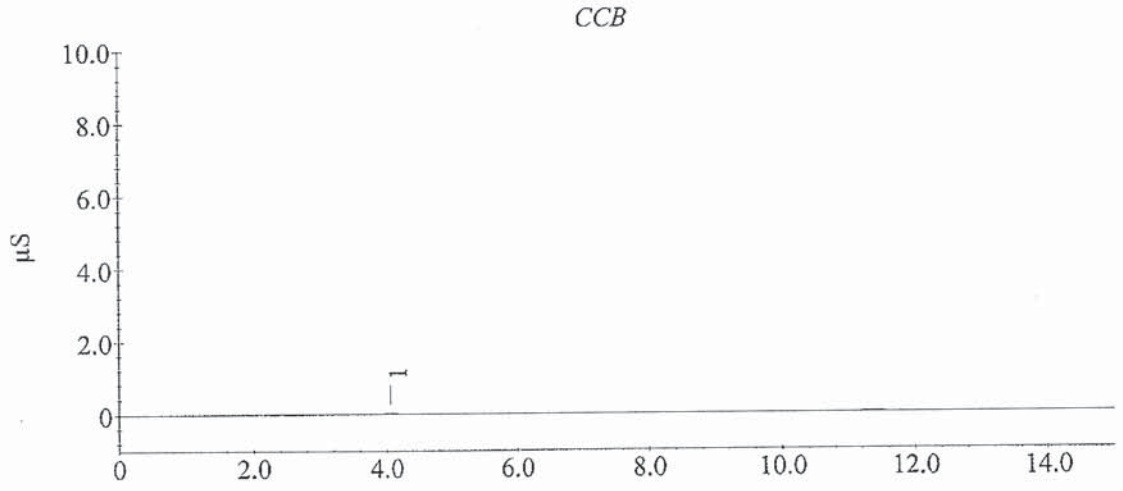
Sample Analysis Report

Sample Name : CCB
Data File Name : d:\peaknet\data\2014\102014\1024_051.DXD

Method File Name : d:\peaknet\method\dx500lowno3.met
Date Time Collected : 10/25/2014 06:51:00
System Operator : DMT
Dilution Factor : 1.00
Injection Number : 51

Peak Information : All Peaks

Peak #	Component Name	Retention Time	Amount	Peak Area	Peak Height
1	CHLORIDE,16887-00	4.05	0.020	4176	386



214102205 597

GCAL ANALYTICAL LABORATORIES, LLC

IC STANDARD IDs

Date: 10-26-14
Analyst: DMT
HBN: 543758
Batch: 4604

Instrument ID: IC1

Secondary Reviewer/Date: RJD 10/28/14

ANIONS – EPA 300.0 / EPA 9056A

Calibration Standard (F, Cl, Br, SO_4) Lot #: 2122345 Expiration Date: 9-30-15
Calibration Standard (NO_2) Lot #: 2122337 Expiration Date: 2-28-15
Calibration Standard (NO_3) Lot #: 2121736 Expiration Date: 1-30-15
Calibration ID 1012-44-6
Calibration Date 10-21-14
Calibration Expiration 1-30-15 (6 months from calibration date or on the earliest expiration date of each calibration standard, whichever is sooner)
CCV/LCS (F, Cl, Br, SO_4, NO_2, NO3) Working Standard ID 1012-47-14
ICV (F, Cl, Br, SO_4, NO_2, NO3) Working Standard ID NA
Eluent Lot #: 10246-11 Expiration Date: 4-23-15

VOLATILE FATTY ACIDS – GCAL SOP WL-070

Calibration Standard (Acetic Acid) Lot #: _____ Expiration Date: _____
Calibration Standard (Butyric Acid) Lot #: _____ Expiration Date: _____
Calibration Standard (Formic Acid) Lot #: _____ Expiration Date: _____
Calibration Standard (Lactic Acid) Lot #: _____ Expiration Date: _____
Calibration Standard (Propionic Acid) Lot #: _____ Expiration Date: _____
Calibration Standard (Pyruvic Acid) Lot #: _____ Expiration Date: _____
Calibration ID _____
Calibration Date _____
Calibration Expiration _____(1 year from calibration date or on the earliest expiration date of each calibration standard, whichever is sooner)
CCV/LCS Working Standard ID _____
ICV Working Standard ID _____
Eluent Lot #: _____ Expiration Date: _____

PERCHLORATE – EPA 314.0

Calibration Standard Lot #: _____ Expiration Date: _____
Calibration ID _____
Calibration Date _____
Calibration Expiration _____(6 months from calibration date or on the earliest expiration date of each calibration standard, whichever is sooner)
CCV/LCS Working Standard ID _____
ICV Working Standard ID _____
Eluent Lot #: _____ Expiration Date: _____

214102205 598

Sample Analysis Report

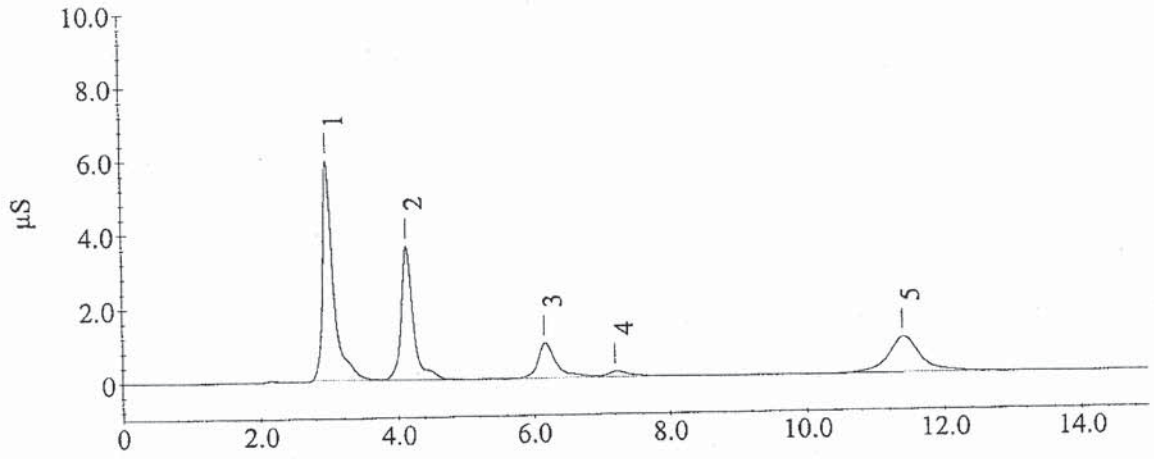
Sample Name : 1374035 Lcs/ccv
Data File Name : d:\peaknet\data\2014\102014\1026_002.DXD

Method File Name : d:\peaknet\method\dx500lowno3.met
Date Time Collected : 10/26/2014 10:16:54
System Operator : DMT
Dilution Factor : 1.00
Injection Number : 2

Peak Information : All Peaks

Peak #	Component Name	Retention Time	Amount	Peak Area	Peak Height
1	FLUORIDE,16984-48-8	2.99	2.370	650308	59271
2	CHLORIDE,16887-00	4.13	2.498 100	447561	35950
3	BROMIDE,24959-67-	6.16	2.449 98	179997	9361
4	NITRATE,14797-55-	7.20	0.133	35294	1425
5	SULFATE,14808-79-	11.39	2.460 98	317500	9515

1374035



Sample Analysis Report

mb/ccm

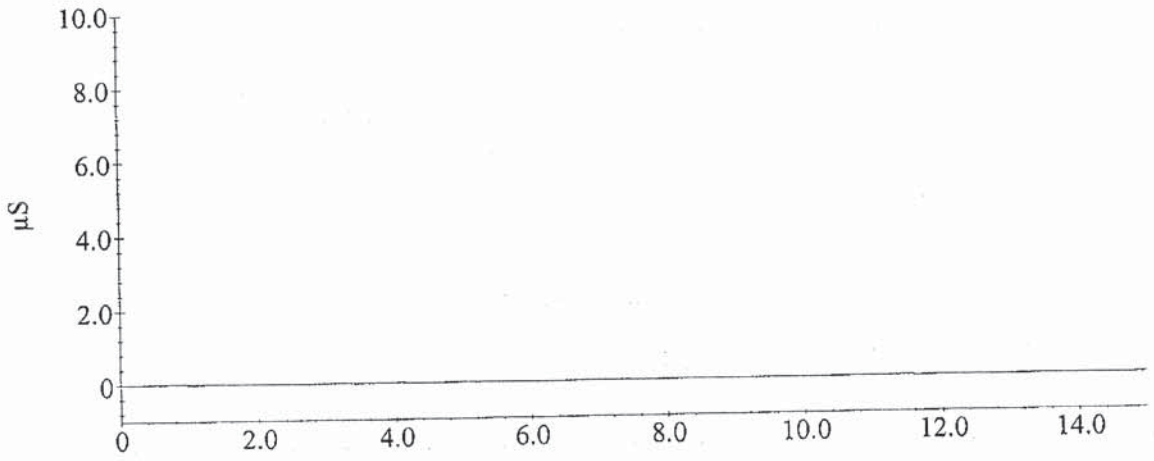
Sample Name : 1374034
Data File Name : d:\peaknet\data\2014\102014\1026_003.DXD

Method File Name : d:\peaknet\method\dx500lowno3.met
Date Time Collected : 10/26/2014 10:34:31
System Operator : DMT
Dilution Factor : 1.00
Injection Number : 3

Peak Information : All Peaks

Peak #	Component Name	Retention Time	Amount	Peak Area	Peak Height

1374034



214102205 600

Sample Analysis Report

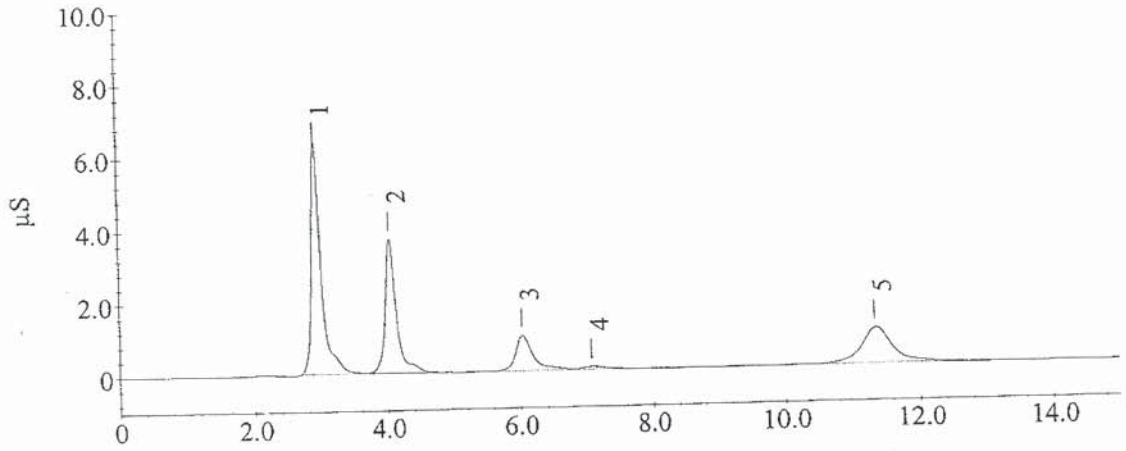
Sample Name : CCV
Data File Name : d:\peaknet\data\2014\102014\1026_014.DXD

Method File Name : d:\peaknet\method\dx500lowno3.met
Date Time Collected : 10/26/2014 13:48:13
System Operator : DMT
Dilution Factor : 1.00
Injection Number : 14

Peak Information : All Peaks

Peak #	Component Name	Retention Time	Amount	Peak Area	Peak Height
1	FLUORIDE,16984-48-8	2.91	2.415	662908	61585
2	CHLORIDE,16887-00	4.05	2.47699	443625	36925
3	BROMIDE,24959-67-	6.03	2.46699	181266	9749
4	NITRATE,14797-55-	7.07	0.097	19138	782
5	SULFATE,14808-79-	11.33	2.47299	319026	9787

CCV



214102205 601

Sample Analysis Report

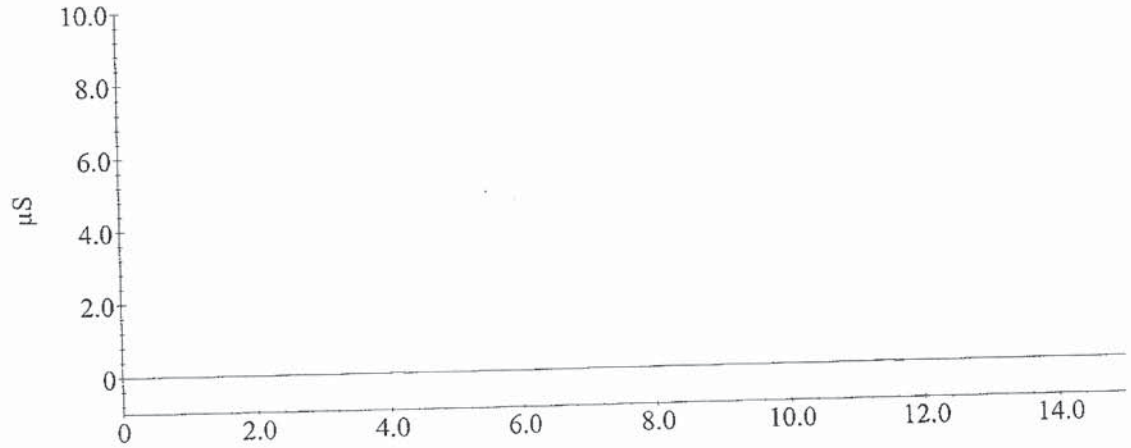
Sample Name : CCB
Data File Name : d:\peaknet\data\2014\102014\1026_015.DXD

Method File Name : d:\peaknet\method\dx500lowno3.met
Date Time Collected : 10/26/2014 14:05:50
System Operator : DMT
Dilution Factor : 1.00
Injection Number : 15

Peak Information : All Peaks

Peak #	Component Name	Retention Time	Amount	Peak Area	Peak Height

CCB



214102205 602

Sample Analysis Report

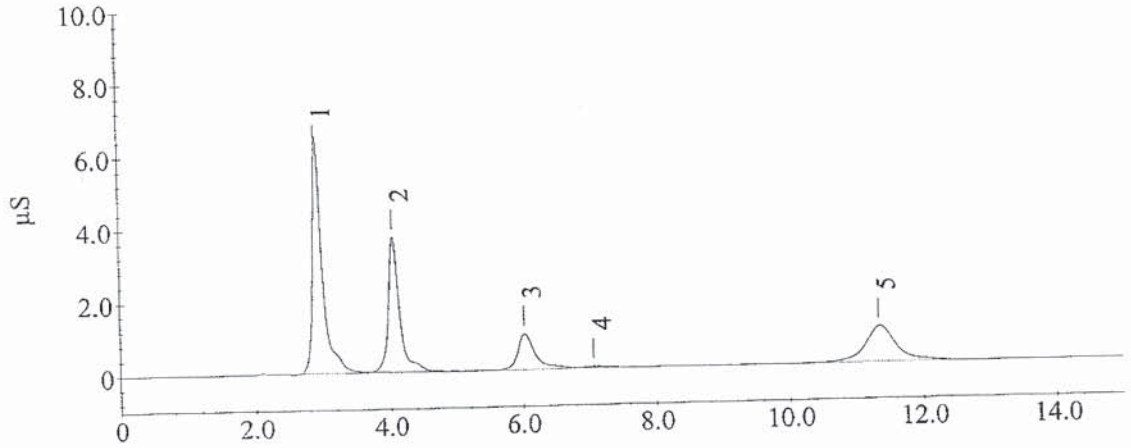
Sample Name : CCV
Data File Name : d:\peaknet\data\2014\102014\1026_026.DXD

Method File Name : d:\peaknet\method\dx500lowno3.met
Date Time Collected : 10/26/2014 17:19:35
System Operator : DMT
Dilution Factor : 1.00
Injection Number : 26

Peak Information : All Peaks

Peak #	Component Name	Retention Time	Amount	Peak Area	Peak Height
1	FLUORIDE,16984-48-8	2.91	2.437	669021	60435
2	CHLORIDE,16887-00	4.05	2.499100	447624	36916
3	BROMIDE,24959-67-	6.03	2.48999	183077	9846
4	NITRATE,14797-55-	7.07	0.073	8020	409
5	SULFATE,14808-79-	11.33	2.46399	317800	9796

CCV



214102205 603

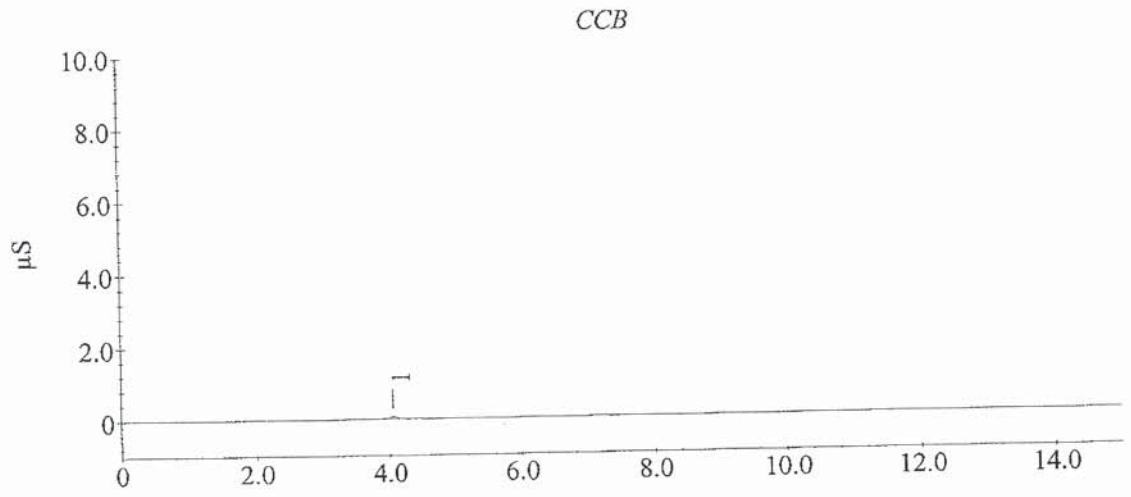
Sample Analysis Report

Sample Name : CCB
Data File Name : d:\peaknet\data\2014\102014\1026_027.DXD

Method File Name : d:\peaknet\method\dx500lowno3.met
Date Time Collected : 10/26/2014 17:37:11
System Operator : DMT
Dilution Factor : 1.00
Injection Number : 27

Peak Information : All Peaks

Peak #	Component Name	Retention Time	Amount	Peak Area	Peak Height
1	CHLORIDE,16887-00	4.05	0.029	5795	560



214102205 604

Sample Analysis Report

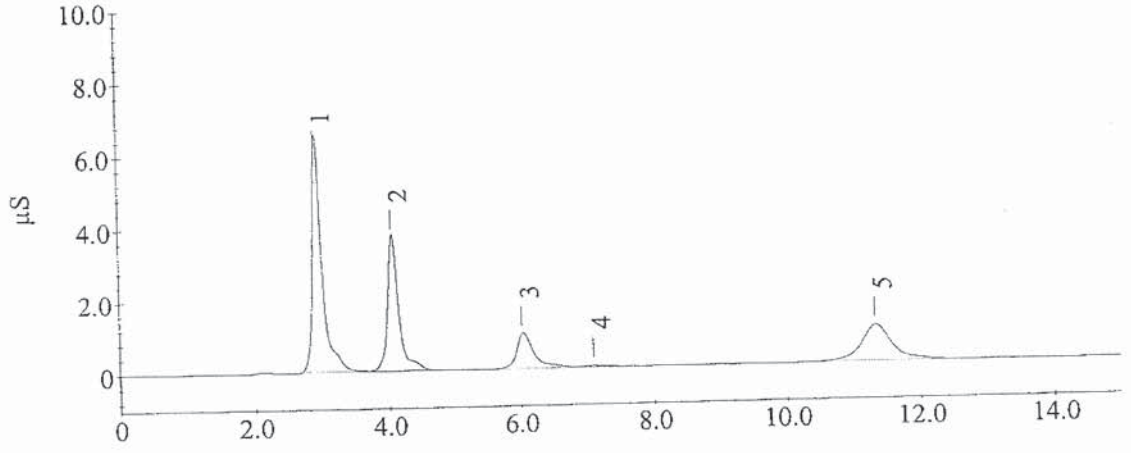
Sample Name : CCV
Data File Name : d:\peaknet\data\2014\102014\1026_038.DXD

Method File Name : d:\peaknet\method\dx500lowno3.met
Date Time Collected : 10/26/2014 20:50:54
System Operator : DMT
Dilution Factor : 1.00
Injection Number : 38

Peak Information : All Peaks

Peak #	Component Name	Retention Time	Amount	Peak Area	Peak Height
1	FLUORIDE,16984-48-8	2.91	2.440	669988	58927
2	CHLORIDE,16887-00	4.05	2.509 100%	449558	36821
3	BROMIDE,24959-67-	6.03	2.487 99%	182889	9627
4	NITRATE,14797-55-	7.09	0.071	7227	379
5	SULFATE,14808-79-	11.33	2.458 98%	317228	9871

CCV



214102205 605

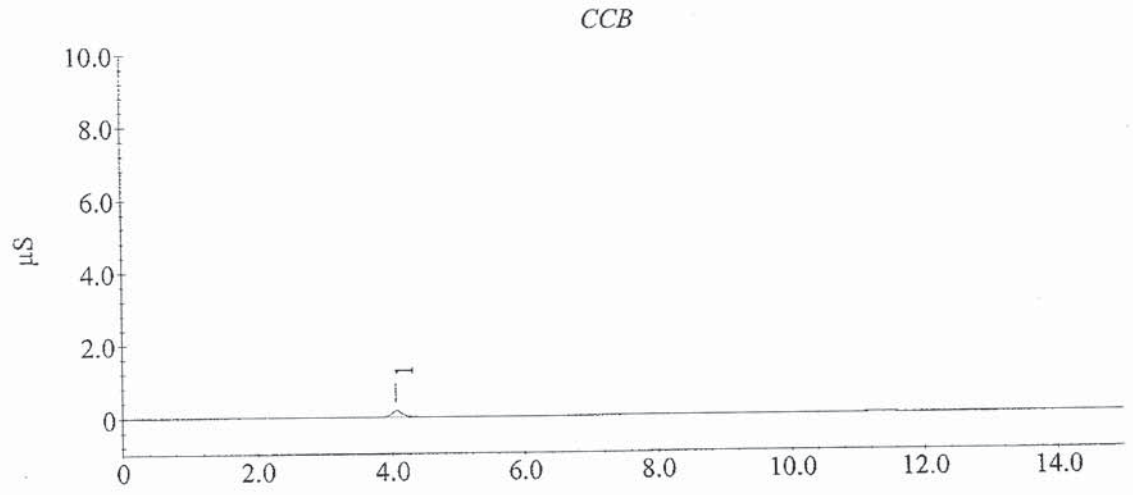
Sample Analysis Report

Sample Name : CCB
Data File Name : d:\peaknet\data\2014\102014\1026_039.DXD

Method File Name : d:\peaknet\method\dx500lowno3.met
Date Time Collected : 10/26/2014 21:08:31
System Operator : DMT
Dilution Factor : 1.00
Injection Number : 39

Peak Information : All Peaks

Peak #	Component Name	Retention Time	Amount	Peak Area	Peak Height
1	CHLORIDE,16887-00	4.05	0.119	21902	1804



214102295 606

Sample Analysis Report

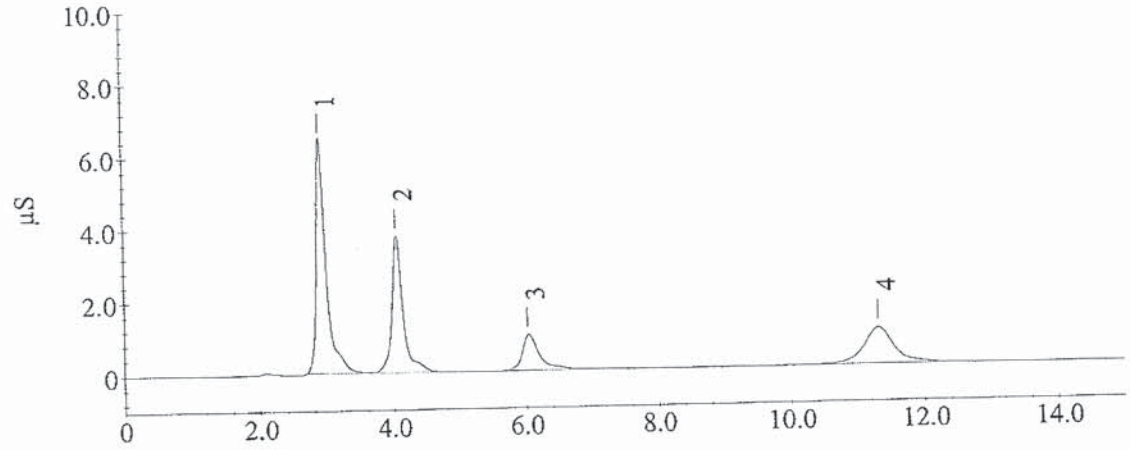
Sample Name : CCV
Data File Name : d:\peaknet\data\2014\102014\1026_050.DXD

Method File Name : d:\peaknet\method\dx500lowno3.met
Date Time Collected : 10/27/2014 00:22:16
System Operator : DMT
Dilution Factor : 1.00
Injection Number : 50

Peak Information : All Peaks

Peak #	Component Name	Retention Time	Amount	Peak Area	Peak Height
1	FLUORIDE,16984-48-8	2.91	2.429	666815	63786
2	CHLORIDE,16887-00	4.05	2.525 101.	452311	37356
3	BROMIDE,24959-67-	6.03	2.400 96/.	176254	9599
4	SULFATE,14808-79-	11.31	2.449 98/.	315950	9866

CCV



214102205 607

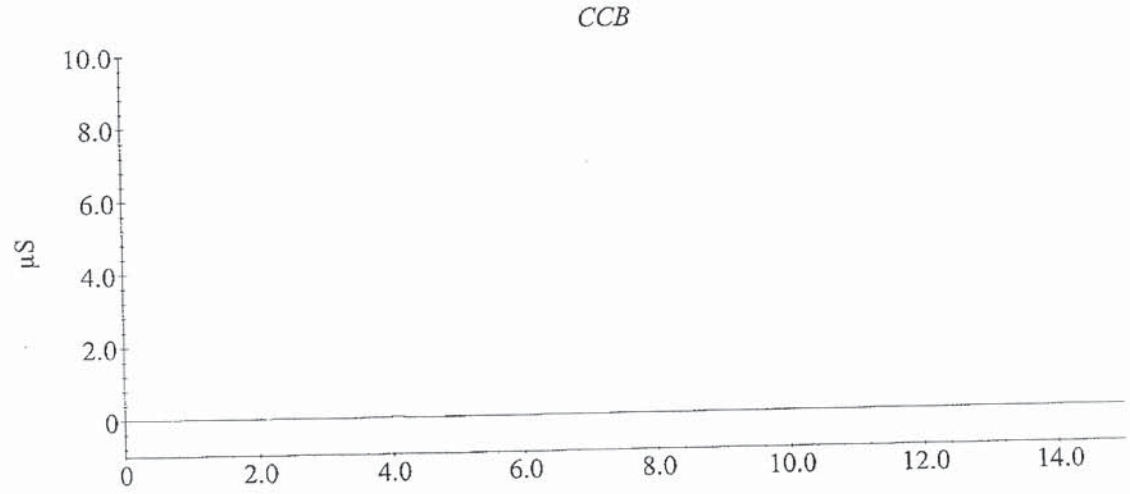
Sample Analysis Report

Sample Name : CCB
Data File Name : d:\peaknet\data\2014\102014\1026_051.DXD

Method File Name : d:\peaknet\method\dx500lowno3.met
Date Time Collected : 10/27/2014 00:39:53
System Operator : DMT
Dilution Factor : 1.00
Injection Number : 51

Peak Information : All Peaks

Peak #	Component Name	Retention Time	Amount	Peak Area	Peak Height



214102205 608

Sample Analysis Report

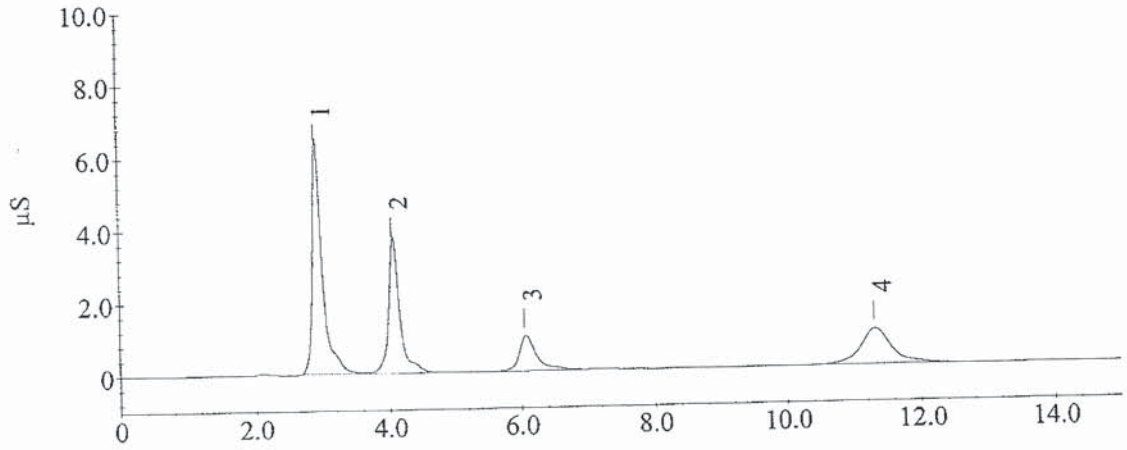
Sample Name : CCV
Data File Name : d:\peaknet\data\2014\102014\1026_061.DXD

Method File Name : d:\peaknet\method\dx500lowno3.met
Date Time Collected : 10/27/2014 03:36:01
System Operator : DMT
Dilution Factor : 1.00
Injection Number : 61

Peak Information : All Peaks

Peak #	Component Name	Retention Time	Amount	Peak Area	Peak Height
1	FLUORIDE,16984-48-8	2.91	2.439	669502	61206
2	CHLORIDE,16887-00	4.05	2.533 101%	453772	35251
3	BROMIDE,24959-67-	6.05	2.428 97%	178378	9537
4	SULFATE,14808-79-	11.31	2.465 99%	318115	9826

CCV



214102205 609

Sample Analysis Report

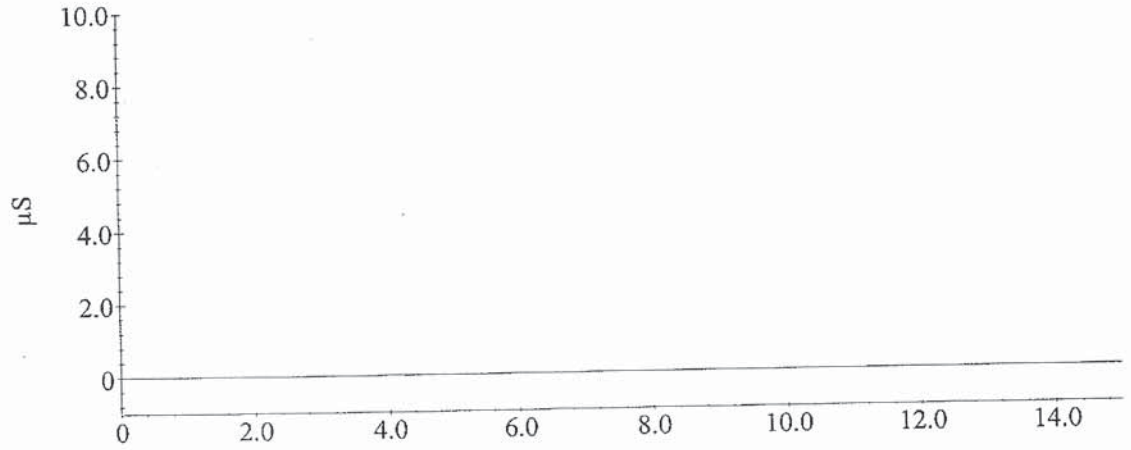
Sample Name : CCB
Data File Name : d:\peaknet\data\2014\102014\1026_062.DXD

Method File Name : d:\peaknet\method\dx500lowno3.met
Date Time Collected : 10/27/2014 03:53:38
System Operator : DMT
Dilution Factor : 1.00
Injection Number : 62

Peak Information : All Peaks

Peak #	Component Name	Retention Time	Amount	Peak Area	Peak Height

CCB



214102205 610

GCAL ANALYTICAL LABORATORIES, LLC

IC STANDARD IDs

Date: 10/21/14
Analyst: DMT
HBN: ICAL
Batch: NA

Secondary Reviewer/Date: RJD 10/22/14

Instrument ID: IC1

ANIONS – EPA 300.0 / EPA 9056A

Calibration Standard (F, Cl, Br, SO_4) Lot #: 2122345 Expiration Date: 9/30/15
Calibration Standard (NO_2) Lot #: 2122337 Expiration Date: 2/28/15
Calibration Standard (NO_3) Lot #: 2121736 Expiration Date: 1/30/15
Calibration ID 1012-44-6
Calibration Date 10/21/14
Calibration Expiration 1/30/15 (6 months from calibration date or on the earliest expiration date of each calibration standard, whichever is sooner)
CCV/LCS (F, Cl, Br, SO_4, NO_2, NO3) Working Standard ID 1012-44-6
ICV (F, Cl, Br, SO_4, NO_2, NO3) Working Standard ID 1012-45-4
Eluent Lot #: 1012-43-5 Expiration Date: ~~4/17/14~~ 4/17/15 RJD 10/22/14

VOLATILE FATTY ACIDS – GCAL SOP WL-070

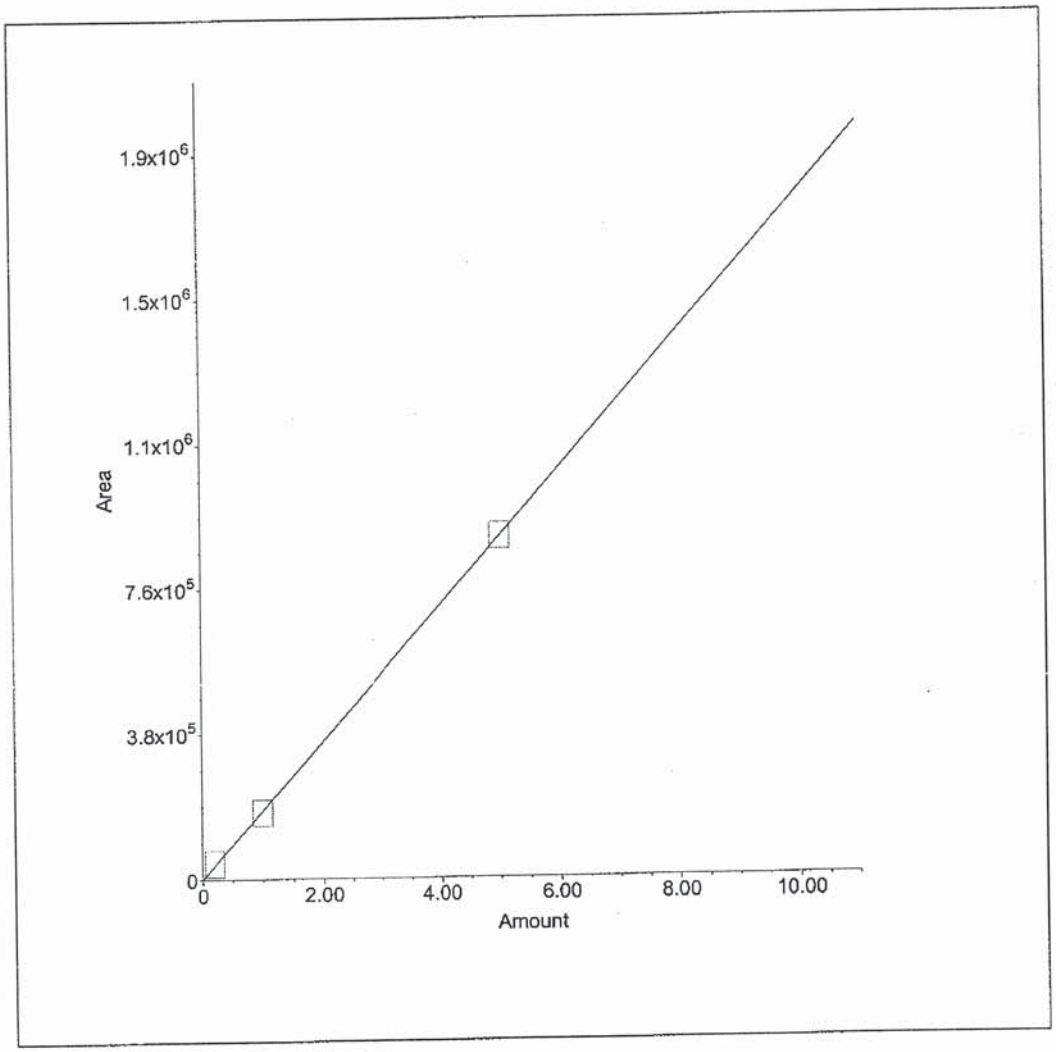
Calibration Standard (Acetic Acid) Lot #: _____ Expiration Date: _____
Calibration Standard (Butyric Acid) Lot #: _____ Expiration Date: _____
Calibration Standard (Formic Acid) Lot #: _____ Expiration Date: _____
Calibration Standard (Lactic Acid) Lot #: _____ Expiration Date: _____
Calibration Standard (Propionic Acid) Lot #: _____ Expiration Date: _____
Calibration Standard (Pyruvic Acid) Lot #: _____ Expiration Date: _____
Calibration ID _____
Calibration Date _____
Calibration Expiration _____ (1 year from calibration date or on the earliest expiration date of each calibration standard, whichever is sooner)
CCV/LCS Working Standard ID _____
ICV Working Standard ID _____
Eluent Lot #: _____ Expiration Date: _____

PERCHLORATE – EPA 314.0

Calibration Standard Lot #: _____ Expiration Date: _____
Calibration ID _____
Calibration Date _____
Calibration Expiration _____ (6 months from calibration date or on the earliest expiration date of each calibration standard, whichever is sooner)
CCV/LCS Working Standard ID _____
ICV Working Standard ID _____
Eluent Lot #: _____ Expiration Date: _____

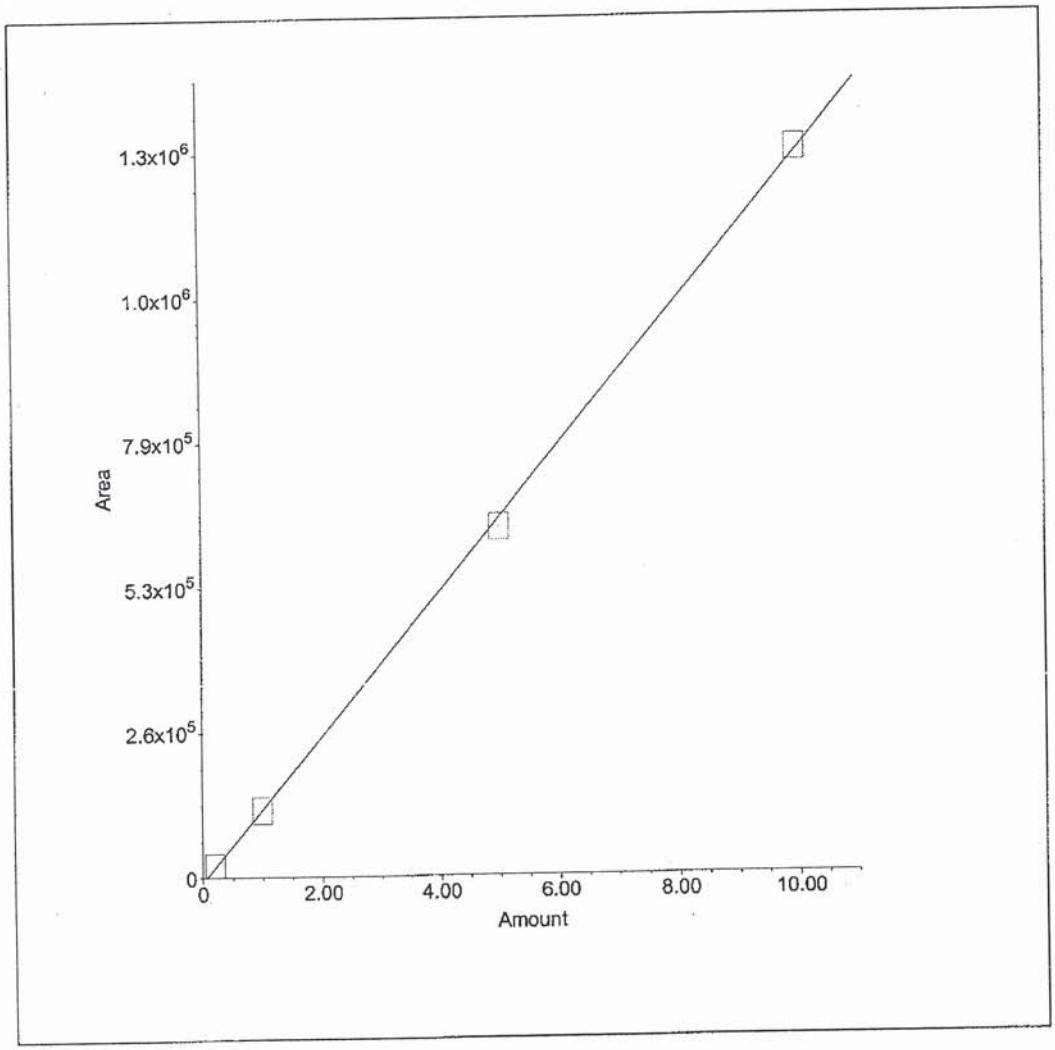
214102295 611

2. Component:CHLORIDE,16887-00
Standard:External Fit Type:Linear
Origin:Include Calibration:Area
r^2=0.999913
Amt=5.59e-006*Resp+-0.003601



214102205 612

6. Component:SULFATE,14808-79-
Standard:External Fit Type:Linear
Origin:Include Calibration:Area
r^2=0.999658
Amt=7.545e-006*Resp+0.06484



214102205 613

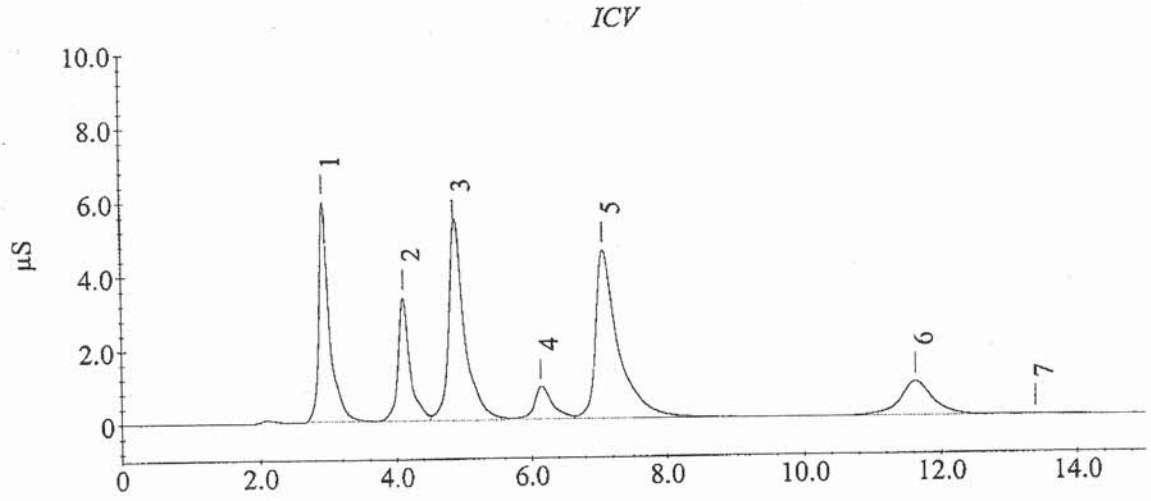
Sample Analysis Report

Sample Name : ICV
Data File Name : d:\peaknet\data\2014\102014\1021_009.DXD

Method File Name : d:\peaknet\method\dx500lowno3.met
Date Time Collected : 10/21/2014 18:23:53
System Operator : DMT
Dilution Factor : 1.00
Injection Number : 9

Peak Information : All Peaks

Peak #	Component Name	Retention Time	Amount	Peak Area	Peak Height
1	FLUORIDE,16984-48-8	2.93	2.38395	654133	59497
2	CHLORIDE,16887-00	4.11	2.37795	425858	33475
3	NITRITE,14797-65-0	4.85	2.39196	885100	52157
4	BROMIDE,24959-67-	6.13	2.39396	175740	8888
5	NITRATE,14797-55-	7.07	2.37895	1062997	45548
6	SULFATE,14808-79-	11.63	2.42897	313228	9261
7	Unknown 1	13.39	0.000	5161	183



214102295 614

GCAL ANALYTICAL LABORATORIES, LLC

LACHAT STANDARD IDs

Date: 10-27-14
Analyst: JEM
HBN: 543866
Batch: 13184

Secondary Reviewer/Date: RJO 10/29/14

Test: Cyanide
Calibration Standard Lot: 2122334
Calibration Std. Exp: 1-31-15
Calibration ID: 1012-27-6
Calibration Date: 9-30-14
Calibration Exp: 1-31-15

Note: Calibration expires 6 months from calibration date or on the calibration standard expiration date, whichever is sooner, with the exception of chloride. The calibration for chloride expires 1 year from calibration date or on the calibration standard expiration date, whichever is sooner.

CHLORIDE - SM 4500-Cl E-2011 / EPA 9251

CCV (LCS) Standard ID _____
ICV Standard ID _____
0.5M Ferric Nitrate Lot/Exp. _____
Mercuric Thiocyanate Lot/Exp. _____
Color Reagent Lot/Exp. _____

CYANIDE - EPA 335.4 / SM 4500-Cn G-2011 / EPA 9012B

CCV Standard ID 1012-49-5
ICV Standard ID 9-5-8
Phosphate Buffer Lot/Exp. 1012-49-3/11-27-14
Chloramine T Lot/Exp. 1012-49-4/10-28-14
Pyridine Lot/Exp. 1012-20-4/3-24-15
0.25N NaOH Lot/Exp. 2122261/2-28-15
Prep Batch HBN 543494

N+N/NITRATE/NITRITE - EPA 353.2

N+N:
CCV (LCS) Standard ID _____
ICV Standard ID _____
Nitrite (NO_2):
CCV (LCS) Standard ID _____
ICV Standard ID _____
Reagents:
Ammonium Chloride Buffer Lot/Exp. _____
Sulfanilamide Color Reagent Lot/Exp. _____
Sodium Thiosulfate 0.025N Lot/Exp. _____
Calculations:
$NO_3 = N+N - NO_2$
Column Efficiency = (LCS N+N*100) / LCS NO_2 (must be 90-110%)
Column Efficiency _____

pH check and adjustment (if necessary):
Reagent used for pH adjustment: HCl or NH_4OH
HCl Concentrated Lot/Exp. _____
NH_4OH Concentrated Lot/Exp. _____
Initial and final pH for each sample recorded on Batch Sheet

PHENOLICS - EPA 420.4 / EPA 9066

CCV Standard ID _____
ICV Standard ID _____
Phenol Buffer Lot/Exp. _____
4-Aminoantipyrine Lot/Exp. _____
Prep Batch HBN _____

PHOSPHORUS - EPA 365.1

CCV Standard ID /
ICV Standard ID _____
Ascorbic Acid Lot/Exp. _____
0.11N H2SO4 Lot/Exp. _____
Molybdate Color Lot/Exp. _____
Prep Batch HBN _____

214102205 615

Author: WET

Date : 10/27/2014

Original Run Filename: OM_10-27-2014_18-52-42.OMN created 10/27/2014 18:52:42
Original Run Author's Signature: [WET]
Current Run Filename: OM_10-27-2014_18-52-42.OMN last modified 10/27/2014 19:13:09
Current Run Author's Signature: [WET]
Description: Default New Run

Sample	Rep.	Channel 1 Cyanide~57 -12-5 (mg/L)	Detection Time	MDF	
CCV	1	✓ 0.0515	10/27/2014@18:53:33		103%
Known Conc:		0.0500			
Calibration:		Table/Fig. 1			
CCB	1	✓ 0.0006	10/27/2014@18:54:33		
Known Conc:		0.0000			
1372450 mB	1	✓ -0.0079	10/27/2014@18:55:32		
1372451 Low	1	RR 0.0056	10/27/2014@18:56:30		Rerun 88%
1372452 High	1	✓ 0.0876	10/27/2014@18:57:29		
21410165103	1	✓ 0.0036	10/27/2014@18:58:28		89%
1372453 MS	1	✓ 0.0921	10/27/2014@18:59:26		
1372454 DUP	1	✓ 0.0030	10/27/2014@19:00:25		
21410165002	1	✓ 0.2375	10/27/2014@19:01:23	20.00	
21410220501	1	✓ 0.0014	10/27/2014@19:02:20		
21410220503	1	✓ 0.0015	10/27/2014@19:03:17		
21410220504	1	✓ 0.0020	10/27/2014@19:04:15		
CCV	1	✓ 0.0522	10/27/2014@19:05:12		104%
Known Conc:		0.0500			
CCB	1	✓ -0.0156	10/27/2014@19:06:08		
Known Conc:		0.0000			
1372451 Low	1	✓ 0.0206	10/27/2014@19:07:05		103%
21410220505	1	✓ 0.0097	10/27/2014@19:08:03		
21410220507	1	✓ 0.0025	10/27/2014@19:09:01		
21410220801	1	✓ -0.0067	10/27/2014@19:10:00		
CCV	1	✓ 0.0528	10/27/2014@19:10:58		106%
Known Conc:		0.0500			
CCB	1	✓ -0.0006	10/27/2014@19:11:55		
Known Conc:		0.0000			

Table 1: Cyanide~57-12-5

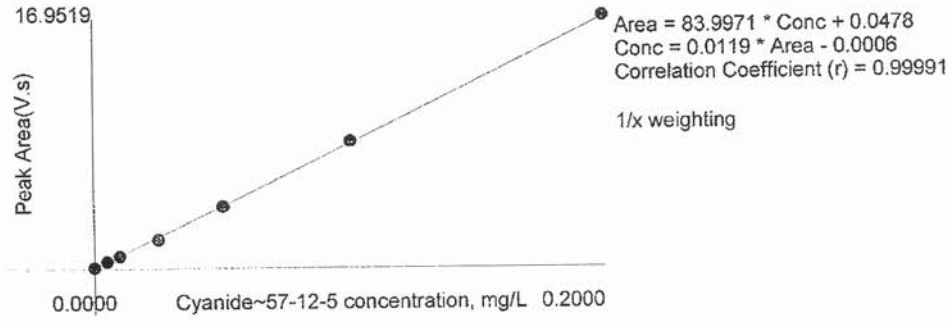
	Conc. (mg/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	0.2000	1	16.9519	0.9486	-0.6	09/30/2014	10:24:20
2	0.1000	1	8.5820	0.4825	-1.6	09/30/2014	10:25:20
3	0.0500	1	4.2070	0.2341	1.0	09/30/2014	10:26:19
4	0.0250	1	1.9695	0.1073	8.3	09/30/2014	10:27:18
5	0.0100	1	0.8523	0.0460	4.0	09/30/2014	10:28:16
6	0.0050	1	0.4827	0.0244	-3.2	09/30/2014	10:29:15
7	0.0000	1	0.0809	0.0021		09/30/2014	10:30:13

214102205 616

Author: WET

Date : 10/27/2014

Figure 1: Cyanide~57-12-5



214102205 617

CYANIDE DISTILLATION
EPA 335.2 CLP-M/EPA 335.3/SW-846 9012A/SM 4500-CN

START	10-22-14 10:00	END	11:00	ANALYST	DNM
MATRIX	WATER SOLID			HBN:	543494

	CLIENT	CLIENT ID	GCAL ID	INITIAL VOL/WT mL g	FINAL VOLUME (mL)	CHLORINE Yes No	SULFIDE Yes No	SAMPLE TYPE	COMMENTS	REAGENT LOT NO:
1	QC ACCOUNT	MB for HBN 543494 [INPR/13701]	1372450	50	50	X	X	MB		1.25M NaOH:1 9-5-9
2	QC ACCOUNT	LCS for HBN 543494 [INPR/13701	1372451					LCS		
3	QC ACCOUNT	LCSHI for HBN 543494 [INPR/137	1372452					LCSHI		Ca(OCl2):1 NA
4	4849	91088	21410165103					SAMPLE		
5	QC ACCOUNT	91088(1370971MS)	1372453					MS		0.1 NaS2O3:1
6	QC ACCOUNT	91088(1370971DUP)	1372454					DUP		
7	0042	101 (6PM)	21410165002					SAMPLE		Bi(NO3):2,3
8		MADIMW002	21410220501	50	50	X	X		12:30	
9		MADIMW001	21410220502							Ascorbic Acid:2,3
10		MADIMW004	21410220504							Sulfamic Acid:2,3 9-5-7
11		MADIMW004-A	21410220505							
12		MADIMW003	21410220507							1:1 H2SO4:2 9-6-3
13		GEWC-1	21410220801	1.0 *						
14										2.5M MgCl:2 9-6-17
15										
16										Zn (C2H3O2):3 NA
17										
18										0.1% Methyl Red:3
19										
21										Acetate Buffer:3
22										
23										5% NaOH (CLP):4
24										
25										1.0N NaOH:1,2,3
26										

Type of cyanide prep: CNC-Total=2, CNAC-Amenable=1, CNFR-Free=3, CNC-CLP=4

COMMENTS:

*SAMPLE VOLUME REDUCED DUE TO MATRIX -DNM

BALANCE ID: NA TEMP: 150°C

LCS/MS SPIKE ID	9-5-8	CONC:	10PPM			Analyst Review	DATE
LCS LOW VOL	100VL	LCS HIGH VOL	500VL	LCS CLP VOL	NA	DNM	10-22-14
MS WATER VOL	500VL	MS SOLID VOL	NA				
						Secondary Review	DATE
SPIKE WITNESS	NA					TES	10/27/14

214102205 618

GCAL ANALYTICAL LABORATORIES, LLC

LACHAT STANDARD IDs

Date: 10/28/14
Analyst: DJH
HBN: 543880, 543874, 543881, 543876
Batch: 13187, 13185, 13188, 13186

Secondary Reviewer/Date: RJO 10/30/14

Test: CYANIDE
Calibration Standard Lot: 212 2334
Calibration Std. Exp: 1/31/15
Calibration ID: 1027-27-6
Calibration Date: 9/30/14
Calibration Exp: 1/31/15

Note: Calibration expires 6 months from calibration date or on the calibration standard expiration date, whichever is sooner, with the exception of chloride. The calibration for chloride expires 1 year from calibration date or on the calibration standard expiration date, whichever is sooner.

CHLORIDE - SM 4500-Cl E-2011 / EPA 9251

CCV (LCS) Standard ID _____
ICV Standard ID _____
0.5M Ferric Nitrate Lot/Exp. _____
Mercuric Thiocyanate Lot/Exp. _____
Color Reagent Lot/Exp. _____

CYANIDE - EPA 335.4 / SM 4500-Cn G-2011 / EPA 9012B

CCV Standard ID 1012-49-9
ICV Standard ID _____
Phosphate Buffer Lot/Exp. 1012-49-3 11/27/14
Chloramine T Lot/Exp. 1012-49-8 11/29/14
Pyridine Lot/Exp. 212 2261 2/28/15
0.25N NaOH Lot/Exp. 1012-49-10 4/28/15
Prep Batch HBN 543431, 543429, 543197, 543680

N+N/NITRATE/NITRITE - EPA 353.2

N+N:
CCV (LCS) Standard ID _____
ICV Standard ID _____
Nitrite (NO_2):
CCV (LCS) Standard ID _____
ICV Standard ID _____
Reagents:
Ammonium Chloride Buffer Lot/Exp. _____
Sulfanilamide Color Reagent Lot/Exp. _____
Sodium Thiosulfate 0.025N Lot/Exp. _____
Calculations:
$NO_3 = N+N - NO_2$
Column Efficiency = (LCS N+N*100) / LCS NO_2 (must be 90-110%)
Column Efficiency _____

pH check and adjustment (if necessary):
Reagent used for pH adjustment: HCl or NH_4OH
HCl Concentrated Lot/Exp. _____
NH_4OH Concentrated Lot/Exp. _____
Initial and final pH for each sample recorded on Batch Sheet

PHENOLICS - EPA 420.4 / EPA 9066

CCV Standard ID _____
ICV Standard ID _____
Phenol Buffer Lot/Exp. _____
4-Aminoantipyrine Lot/Exp. _____
Prep Batch HBN _____

PHOSPHORUS - EPA 365.1

CCV Standard ID _____
ICV Standard ID _____
Ascorbic Acid Lot/Exp. _____
0.11N H2SO4 Lot/Exp. _____
Molybdate Color Lot/Exp. _____
Prep Batch HBN _____

214102205 619

Author: WET

Date : 10/28/2014

Original Run Filename: OM_10-28-2014_10-01-15.OMN created 10/28/2014 10:01:15
Original Run Author's Signature: [WET]
Current Run Filename: OM_10-28-2014_10-01-15.OMN last modified 10/28/2014 10:50:41
Current Run Author's Signature: [WET]
Description: Default New Run

Sample	Rep.	Channel 1 Cyanide~57-12-5 Conc. (mg/L)	Area (Vs)	Detection Time	MDF	
1800	1	✓ 0.0549	4.6645	10/28/2014@10:02:07		110%
Known Conc:		0.0500				
Calibration:		Table/Fig. 1				
1900	1	✓ 0.0005	0.0928	10/28/2014@10:03:07		
Known Conc:		0.0000				
1372120 MB	1	RR 0.0184	1.5924	10/28/2014@10:04:06		
1372121 LCS	1	RR 0.0253	0.1533	10/28/2014@10:05:05	20.00	
21410146701	1	✓ -0.0005	0.0083	10/28/2014@10:06:03		
1372122 Dup	1	RR 0.0101	0.8999	10/28/2014@10:07:02		
21410202001	1	✓ -0.0006	-0.0013	10/28/2014@10:08:00		
1372114 MB	1	✓ -0.0008	-0.0161	10/28/2014@10:08:59		
1372115 LCS	1	✓ 1.7386	7.3549	10/28/2014@10:09:56	20.00	
21410165201	1	✓ 0.0009	0.1255	10/28/2014@10:10:54		
1372116 Dup	1	✓ 0.0008	0.1170	10/28/2014@10:11:51		
21410165501	1	✓ 0.0042	0.4037	10/28/2014@10:12:48		
1800	1	✓ 0.0541	4.5970	10/28/2014@10:13:46		108%
Known Conc:		0.0500				
1900	1	✓ -0.0010	-0.0379	10/28/2014@10:14:42		
Known Conc:		0.0000				
21410103701	1	✓ 0.0009	0.1237	10/28/2014@10:15:39		
1371021 MB	1	✓ 0.0002	0.0664	10/28/2014@10:16:37		
1371022 LCS	1	✓ 0.0191	1.6515	10/28/2014@10:17:37		96%
1371023 LCSH	1	✓ 0.0890	7.5313	10/28/2014@10:18:36		89%
21410165301	1	RR 1.0310	86.7226	10/28/2014@10:19:35		
1371024 MS	1	RR 0.9292	78.1606	10/28/2014@10:20:33		
1371025 Dup	1	RR 0.6595	55.4857	10/28/2014@10:21:32		
1373476 MB	1	0.0041	0.3881	10/28/2014@10:22:30		95%
1373477 LCS	1	0.0185	1.6034	10/28/2014@10:23:29		93%
1373478 LCSH	1	0.0931	7.8710	10/28/2014@10:24:27		109%
1800	1	✓ 0.0543	4.6130	10/28/2014@10:25:24		
Known Conc:		0.0500				
1900	1	✓ 0.0010	0.1295	10/28/2014@10:26:22		
Known Conc:		0.0000				
21410226309	1	0.0035	0.3440	10/28/2014@10:27:19		
21410220509	1	0.0633	5.3669	10/28/2014@10:28:16		
1373479	1	-0.0028	-0.1899	10/28/2014@10:29:13		
1373480	1	-0.0008	-0.0218	10/28/2014@10:30:09		
21410220511	1	0.0005	0.0884	10/28/2014@10:31:07		
21410220512	1	0.0007	0.1068	10/28/2014@10:32:07		
21410220514	1	0.0023	0.2383	10/28/2014@10:33:06		
21410226401	1	0.0461	3.9267	10/28/2014@10:34:05		
21410226402	1	0.0032	0.3191	10/28/2014@10:35:04		
21410231401	1	0.0021	0.2259	10/28/2014@10:36:02		
1800	1	0.0539	4.5771	10/28/2014@10:37:01		108%
Known Conc:		0.0500				
1900	1	0.0007	0.1037	10/28/2014@10:37:59		
Known Conc:		0.0000				
21410231403	1	0.0035	0.3422	10/28/2014@10:38:58		
21410231404	1	0.0033	0.3204	10/28/2014@10:39:55		
21410231405	1	0.0034	0.3326	10/28/2014@10:40:53		
21410231406	1	0.0046	0.4372	10/28/2014@10:41:50		
21410220515	1	0.0027	0.2719	10/28/2014@10:42:47		
21410220516	1	0.0882	7.4628	10/28/2014@10:43:44		
21410220517	1	0.0839	7.1006	10/28/2014@10:44:40		
21410220520	1	0.0024	0.2502	10/28/2014@10:45:38		
21410165301 CNAC	1	0.5154	43.3756	10/28/2014@10:46:38		
21410165301 CNAC DUP	1	0.2378	20.0403	10/28/2014@10:47:37		
1800	1	0.0015	0.1745	10/28/2014@10:48:37		

Labeled wrong

RR

RR

RR

RR

RR wrong location

214102205 S20

Author: WET

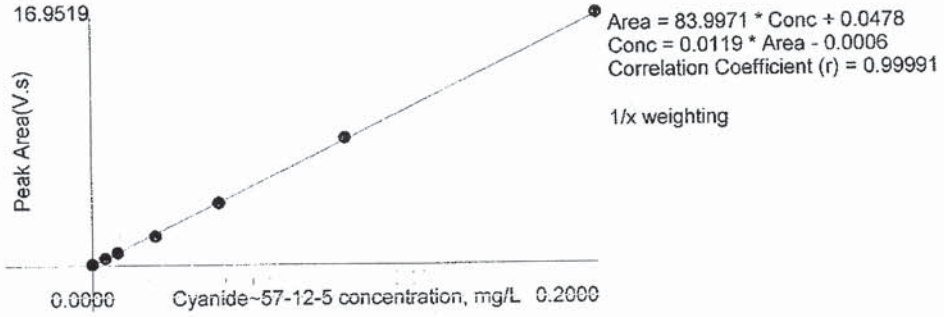
Date : 10/28/2014

Known Conc:	0.0500			

Table 1: Cyanide~57-12-5

	Conc. (mg/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	0.2000	1	16.9519	0.9486	-0.6	09/30/2014	10:24:20
2	0.1000	1	8.5820	0.4825	-1.6	09/30/2014	10:25:20
3	0.0500	1	4.2070	0.2341	1.0	09/30/2014	10:26:19
4	0.0250	1	1.9695	0.1073	8.3	09/30/2014	10:27:18
5	0.0100	1	0.8523	0.0460	4.0	09/30/2014	10:28:16
6	0.0050	1	0.4827	0.0244	-3.2	09/30/2014	10:29:15
7	0.0000	1	0.0809	0.0021		09/30/2014	10:30:13

Figure 1: Cyanide~57-12-5



214102205 621

Author: WET

Date : 10/28/2014

Original Run Filename: OM_10-28-2014_11-43-17.OMN created 10/28/2014 11:43:17
Original Run Author's Signature: [WET]
Current Run Filename: OM_10-28-2014_11-43-17.OMN last modified 10/28/2014 11:52:58
Current Run Author's Signature: [WET]
Description: Default New Run

	Sample	Rep.	Channel 1 Cyanide~57-12-5 Conc. (mg/L)	Area (Vs)	Detection Time	MDF
	1800	1	0.0519	4.4119	10/28/2014@11:44:08	
	Known Conc:		0.0500			
	Calibration:		Table/Fig. 1			
	1900	1	0.0004	0.0778	10/28/2014@11:45:08	
	Known Conc:		0.0000			
39	21410231403	1	0.0013	0.1600	10/28/2014@11:46:06	
40	21410231404	1	0.0016	0.1807	10/28/2014@11:47:04	
41	21410231405	1	0.0025	0.2552	10/28/2014@11:48:01	
42	21410231406	1	0.0023	0.2376	10/28/2014@11:48:59	
43	21410220515	1	-0.2262	-18.9655	10/28/2014@11:49:56	
44	21410220516	1	-0.2383	-19.9866	10/28/2014@11:50:53	

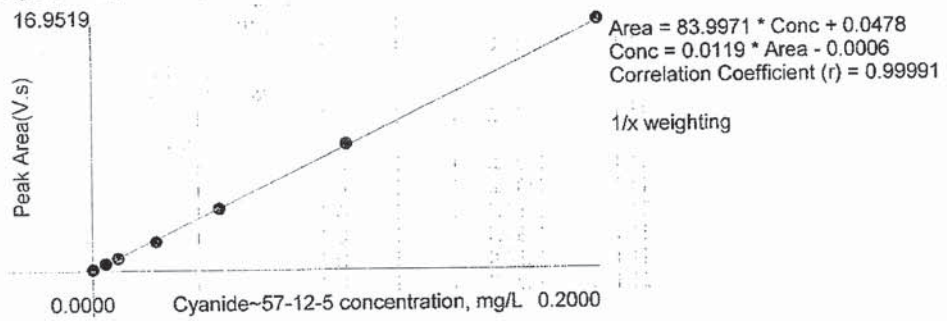
104%

* Lachat stops at this location each time (4)

Table 1: Cyanide~57-12-5 Had a bad clog

	Conc. (mg/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	0.2000	1	16.9519	0.9486	-0.6	09/30/2014	10:24:20
2	0.1000	1	8.5820	0.4825	-1.6	09/30/2014	10:25:20
3	0.0500	1	4.2070	0.2341	1.0	09/30/2014	10:26:19
4	0.0250	1	1.9695	0.1073	8.3	09/30/2014	10:27:18
5	0.0100	1	0.8523	0.0460	4.0	09/30/2014	10:28:16
6	0.0050	1	0.4827	0.0244	-3.2	09/30/2014	10:29:15
7	0.0000	1	0.0809	0.0021		09/30/2014	10:30:13

Figure 1: Cyanide~57-12-5



214102205 622

Author: WET

Date : 10/28/2014

Original Run Filename: OM_10-28-2014_12-09-30.OMN created 10/28/2014 12:09:30
Original Run Author's Signature: [WET]
Current Run Filename: OM_10-28-2014_12-09-30.OMN last modified 10/28/2014 12:37:06
Current Run Author's Signature: [WET]
Description: Default New Run

Sample	Rep.	Channel 1 Cyanide~57-12-5 Conc. (mg/L)	Area (Vs)	Detection Time	MDF
1800	1	✓ 0.0550	4.6732	10/28/2014@12:10:21	
Known Conc:		0.0500			
1900	1	✓ 0.0012	0.1488	10/28/2014@12:11:21	
Known Conc:		0.0000			
Calibration:		Table/Fig. 1			
21410220515	1	0.0030	0.2991	10/28/2014@12:12:19	
21410220516 MS	1	0.0872	7.3801	10/28/2014@12:13:16	
21410220517 MSD	1	0.0832	7.0449	10/28/2014@12:14:12	
21410220520	1	-0.0017	-0.0928	10/28/2014@12:15:10	
211410165301 CNAC	1	RR 5.2546	44.2209	10/28/2014@12:16:10	10.00
21410165301 CNAC DUP	1	RR 0.6010	5.0993	10/28/2014@12:17:09	10.00
21410231403	1	0.0023	0.2387	10/28/2014@12:18:08	
21410231404	1	0.0011	0.1412	10/28/2014@12:19:05	
21410231405	1	0.0013	0.1588	10/28/2014@12:20:03	
21410231406	1	0.0045	0.4218	10/28/2014@12:21:01	
1800	1	✓ 0.0502	4.2669	10/28/2014@12:21:59	
Known Conc:		100.0000			
1900	1	✓ 0.0009	0.1212	10/28/2014@12:22:58	
Known Conc:		100.0000			
1372120 MB	1	RR 0.0261	2.2375	10/28/2014@12:23:58	
1372121 LCS	1	✓ 1.7668	7.4737	10/28/2014@12:24:56	20.00
21410165301	1	✓ 0.7861	6.6558	10/28/2014@12:25:55	10.00
1371024 MS	1	✓ 1.2345	10.4251	10/28/2014@12:26:54	10.00
1371025 Dup	1	✓ 0.7865	6.6586	10/28/2014@12:27:52	10.00
21410220509	1	0.0013	0.1583	10/28/2014@12:28:50	
1373479 MS	1	0.0592	5.0238	10/28/2014@12:29:47	
1373480 Dup	1	-0.0002	0.0276	10/28/2014@12:30:45	
1372122 Dup	1	RR -1.6621e-5	0.0456	10/28/2014@12:31:42	
211410165301 CNAC	1	✓ 0.5910	5.0151	10/28/2014@12:32:40	10.00
1800	1	RR 0.0555	4.7132	10/28/2014@12:33:38	
Known Conc:		100.0000			
1900	1	RR -0.0002	0.0315	10/28/2014@12:34:34	
Known Conc:		100.0000			
1372120	1	RR -0.0007	-0.0147	10/28/2014@12:35:31	

110%
168%
140%
100%
90%
116%
111%

NOT sure if I diluted ← RR ↓

RR ↓

Table 1: Cyanide~57-12-5

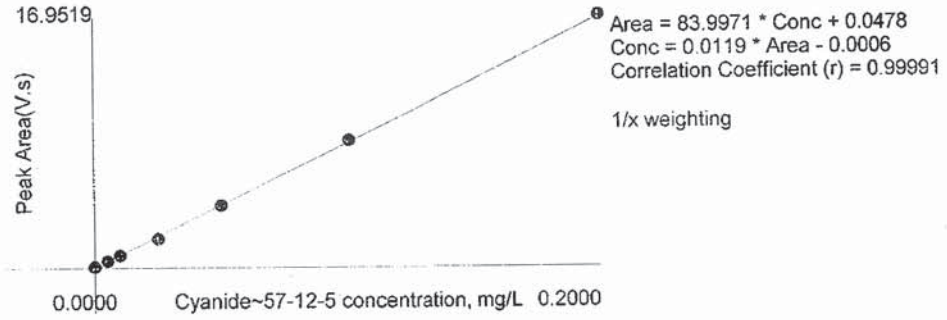
	Conc. (mg/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	0.2000	1	16.9519	0.9486	-0.6	09/30/2014	10:24:20
2	0.1000	1	8.5820	0.4825	-1.6	09/30/2014	10:25:20
3	0.0500	1	4.2070	0.2341	1.0	09/30/2014	10:26:19
4	0.0250	1	1.9695	0.1073	8.3	09/30/2014	10:27:18
5	0.0100	1	0.8523	0.0460	4.0	09/30/2014	10:28:16
6	0.0050	1	0.4827	0.0244	-3.2	09/30/2014	10:29:15
7	0.0000	1	0.0809	0.0021		09/30/2014	10:30:13

214102205 623

Author: WET

Date : 10/28/2014

Figure 1: Cyanide~57-12-5



214102295 624

CYANIDE DISTILLATION
EPA 335.2 CLP-M/EPA 335.3/SW-846 9012A/SM 4500-CN

START	10/24/14	END	13:00	ANALYST	ABG
	~~ABG 10/24/14 9:30~~ 10:30	-			
MATRIX	(WATER) SOLID			HBN:	543680

	CLIENT	CLIENT ID	GCAL ID	INITIAL VOL/WT (mL) g	FINAL VOLUME (mL)	CHLORINE Yes No	SULFIDE Yes No	SAMPLE TYPE	COMMENTS	REAGENT LOT NO:
1	QC ACCOUNT	MB for HBN 543680 [INPR/13709]	1373476	50	50			MB		1.25M NaOH:1 9-5-9
2	QC ACCOUNT	LCS for HBN 543680 [INPR/13709	1373477					LCS		
3	QC ACCOUNT	LCSHI for HBN 543680 [INPR/137	1373478					LCSHI		Ca(OCl2):1 N/A
4	4390	W-29	21410226309					SAMPLE		
5	4747	M114MW002	21410220509					SAMPLE		0.1 NaS2O3:1
6	QC ACCOUNT	M114MW002(1373074MS)	1373479					MS		
7	QC ACCOUNT	M114MW002(1373074DUP)	1373480					DUP		Bi(NO3):2,3
8	4747	M114MW003	21410220511					SAMPLE		
9	4747	M114MW004	21410220512					SAMPLE		Ascorbic Acid:2,3
10	4747	M114MW001	21410220514					SAMPLE		
11	4589	LEACHATE	21410226401					SAMPLE		Sulfamic Acid:2,3 9-7-7
12	4589	LEAK DETECT	21410226402					SAMPLE		
13	4391	MW-6	21410231401					SAMPLE		1:1 H2SO4:2 9-6-3
14	4391	MW-2A	21410231403					SAMPLE		
15	4391	MW-1A	21410231404					SAMPLE		2.5M MgCl:2 9-6-17
16	4391	MW-3	21410231405					SAMPLE		
17	4391	MW-4B	21410231406					SAMPLE		Zn(C2H3O2):3 N/A
18	4747	MWQ-24	21410220515					SAMPLE		
19	4747	MWQ-24-MS	21410220516					MS		0.1% Methyl Red:3
20	747	MWQ-24-SD	21410220517					MSD		
21	4747	MAO2MW001D	21410220520					SAMPLE		Acetate Buffer:3
22										5% NaOH (CLP):4
23										
24										1.0N NaOH:1,2,3
25										
26										

Type of cyanide prep: (CNC-Total)=2, CNAC-Amenable=1, CNFR-Free=3, CNC-CLP=4

COMMENTS:

BALANCE ID: N/A TEMP: 150°C

LCS/MS SPIKE ID	9-5-8	CONC:	10 ppm			Analyst Review	DATE
LCS LOW VOL	100 mL	LCS HIGH VOL	500 mL	LCS CLP VOL	N/A	~~ABG~~ DNM	10/24/14
MS WATER VOL	~~500 mL~~ N/A	MS SOLID VOL	N/A				
	ABG 10/24/14					Secondary Review	DATE
SPIKE WITNESS	N/A					TES	10/27/14

GCAL ANALYTICAL LABORATORIES, LLC

LACHAT STANDARD IDs

Date: 11-6-14
Analyst: JEM
HBN: 544506
Batch: 13219

Secondary Reviewer/Date: RJD 11/6/14

Test: Cyanide
Calibration Standard Lot: 2122334
Calibration Std. Exp: 1-31-15
Calibration ID: 1012-27-6
Calibration Date: 9-30-14
Calibration Exp: 1-31-15

Note: Calibration expires 6 months from calibration date or on the calibration standard expiration date, whichever is sooner, with the exception of chloride. The calibration for chloride expires 1 year from calibration date or on the calibration standard expiration date, whichever is sooner.

CHLORIDE - SM 4500-Cl E-2011 / EPA 9251

CCV (LCS) Standard ID _____
ICV Standard ID _____
0.5M Ferric Nitrate Lot/Exp. _____
Mercuric Thiocyanate Lot/Exp. _____
Color Reagent Lot/Exp. _____

CYANIDE - EPA 335.4 / SM 4500-Cn G-2011 / EPA 9012B

CCV Standard ID 1012-59-6
ICV Standard ID 9-7-12
Phosphate Buffer Lot/Exp. 1012-49-3 / 11-27-14
Chloramine T Lot/Exp. 1012-59-5 / 11-7-14
Pyridine Lot/Exp. 2122261 / 2-28-15
0.25N NaOH Lot/Exp. 1012-58-12 / 5-5-15
Prep Batch HBN 544446

N+N/NITRATE/NITRITE - EPA 353.2

N+N:
CCV (LCS) Standard ID _____
ICV Standard ID _____
Nitrite (NO_2):
CCV (LCS) Standard ID _____
ICV Standard ID _____
Reagents:
Ammonium Chloride Buffer Lot/Exp. _____
Sulfanilamide Color Reagent Lot/Exp. _____
Sodium Thiosulfate 0.025N Lot/Exp. _____
Calculations:
$NO_3 = N+N - NO_2$
Column Efficiency = (LCS N+N*100) / LCS NO_2 (must be 90-110%)
Column Efficiency _____

pH check and adjustment (if necessary):
Reagent used for pH adjustment: HCl or NH_4OH
HCl Concentrated Lot/Exp. _____
NH_4OH Concentrated Lot/Exp. _____
Initial and final pH for each sample recorded on Batch Sheet

PHENOLICS - EPA 420.4 / EPA 9066

CCV Standard ID _____
ICV Standard ID _____
Phenol Buffer Lot/Exp. _____
4-Aminoantipyrine Lot/Exp. _____
Prep Batch HBN _____

PHOSPHORUS - EPA 365.1

CCV Standard ID _____
ICV Standard ID _____
Ascorbic Acid Lot/Exp. _____
0.11N H_2SO_4 Lot/Exp. _____
Molybdate Color Lot/Exp. _____
Prep Batch HBN _____

214102205 626

Author: WET

Date : 11/06/2014

Original Run Filename: OM_11-06-2014_09-45-33.OMN created 11/06/2014 09:45:33
Original Run Author's Signature: [WET]
Current Run Filename: OM_11-06-2014_09-45-33.OMN last modified 11/06/2014 10:17:37
Current Run Author's Signature: [WET]
Description: Default New Run

Sample	Rep.	Channel 1 Cyanide~57-12-5 (mg/L)	Detection Time	MDF	
1800	1	✓ 0.0545	11/06/2014@09:46:24		109%
Known Conc:		0.0500			
1900	1	✓ -0.0013	11/06/2014@09:47:24		
Known Conc:		0.0000			
Calibration:		Table/Fig. 1			
1377405 mb	1	✓ 0.0013	11/06/2014@09:48:23		
1377406 LCS Low	1	✓ 0.0161	11/06/2014@09:49:22		81%
1377407 LCS High	1	✓ 0.0804	11/06/2014@09:50:20		80%
21410220509	1	0.0010	11/06/2014@09:51:18		
21410220511	1	0.0009	11/06/2014@09:52:17		
21410220512	1	0.0010	11/06/2014@09:53:16		
21410220514	1	-0.0013	11/06/2014@09:54:13		
21410220515	1	✓ 0.0014	11/06/2014@09:55:10		
21410220516 ms	1	✓ 0.0887	11/06/2014@09:56:08		87%
21410220517 msd	1	✓ 0.0888	11/06/2014@09:57:05		87%
1800	1	✓ 0.0542	11/06/2014@09:58:02		108%
Known Conc:		✓ 0.0500			
1900	1	0.0006	11/06/2014@09:58:59		
Known Conc:		0.0000			
21410291501	1	✓ 0.0015	11/06/2014@09:59:54		
21410300401	1	✓ 0.0013	11/06/2014@10:00:53		
21410300402 ms	1	✓ 0.0639	11/06/2014@10:01:52		63%
21410300403 msd	1	✓ 0.0634	11/06/2014@10:02:52		62%
21410310505	1	✓ -0.0006	11/06/2014@10:03:51		
21410310506	1	✓ 0.0014	11/06/2014@10:04:49		
21410310507	1	✓ 0.0010	11/06/2014@10:05:48		
21410310508	1	✓ 0.0020	11/06/2014@10:06:47		
21411030501	1	✓ 0.0277	11/06/2014@10:07:45		
21411042405	1	✓ 0.0015	11/06/2014@10:08:42		
1800	1	✓ 0.0537	11/06/2014@10:09:40		107%
Known Conc:		0.0500			
1900	1	✓ 0.0010	11/06/2014@10:10:37		
Known Conc:		0.0000			
DOC 1	1	0.0861	11/06/2014@10:11:35		86%
DOC 2	1	0.0851	11/06/2014@10:12:32		85%
DOC 3	1	0.0862	11/06/2014@10:13:28		86%
DOC 4	1	0.0871	11/06/2014@10:14:25		87%
1800	1	✓ 0.0537	11/06/2014@10:15:23		107%
Known Conc:		0.0500			
1900	1	✓ -0.0010	11/06/2014@10:16:22		
Known Conc:		0.0000			

Original Results are reported.
RJD 11/6/14

Table 1: Cyanide~57-12-5

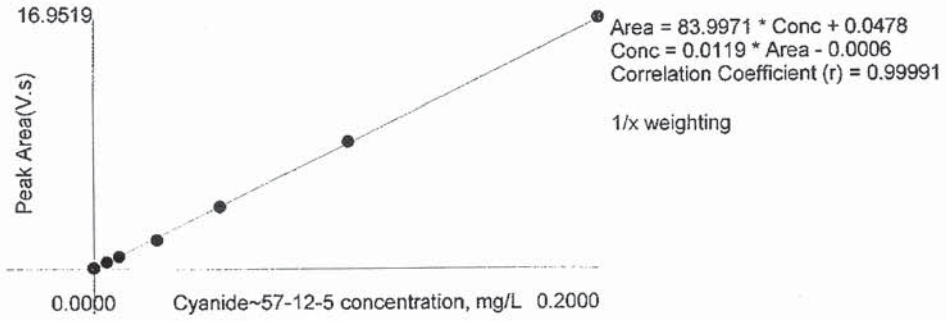
	Conc. (mg/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	0.2000	1	16.9519	0.9486	-0.6	09/30/2014	10:24:20
2	0.1000	1	8.5820	0.4825	-1.6	09/30/2014	10:25:20
3	0.0500	1	4.2070	0.2341	1.0	09/30/2014	10:26:19
4	0.0250	1	1.9695	0.1073	8.3	09/30/2014	10:27:18
5	0.0100	1	0.8523	0.0460	4.0	09/30/2014	10:28:16
6	0.0050	1	0.4827	0.0244	-3.2	09/30/2014	10:29:15
7	0.0000	1	0.0809	0.0021		09/30/2014	10:30:13

214102205 627

Author: WET

Date : 11/06/2014

Figure 1: Cyanide~57-12-5



214102205 629

CYANIDE DISTILLATION
EPA 335.2 CLP-M/EPA 335.3/SW-846 9012A/SM 4500-CN

START	11/5/14 4:00	END	1930	ANALYST	DNM
MATRIX	WATER SOLID			HBN:	544446

	CLIENT	CLIENT ID	GCAL ID	INITIAL VOL/WT mL g	FINAL VOLUME (mL)	CHLORINE Yes No	SULFIDE Yes No	SAMPLE TYPE	COMMENTS	REAGENT LOT NO:
1	QC ACCOUNT	MB for HBN 544446 [INPR/13752]	1377405	50	50			MB		1.25M NaOH:1 9-5-9
2	QC ACCOUNT	LCS for HBN 544446 [INPR/13752	1377406					LCS		
3	QC ACCOUNT	LCSHI for HBN 544446 [INPR/137	1377407					LCSHI		Ca(OCl2):1 NA
4	4747	M114MW002	21410220509					SAMPLE		
5	4747	M114MW003	21410220511					SAMPLE		0.1 Na2S2O3:1
6	4747	M114MW004	21410220512					SAMPLE		
7	4747	M114MW001	21410220514					SAMPLE		Bi(NO3):2,3
8	4747	MWQ-24	21410220515					SAMPLE		
9	4747	MWQ-24-ms	21410220516					MS		Ascorbic Acid:2,3
10	4747	MWQ-24-sd	21410220517					MSD		
11	4859	GW-10	21410291501					SAMPLE		Sulfamic Acid:2,3 9-7-7
12	4859	GW9	21410300401					SAMPLE		
13	4859	GW9 MS	21410300402					MS		1:1 H2SO4:2 9-6-3
14	4859	GW9 MSD	21410300403					MSD		
15	4859	GW-7	21410310505					SAMPLE		2.5M MgCl:2 9-6-17
16	4859	GW-8	21410310506					SAMPLE		
17	4859	DUP-2	21410310507					FLDDUP		Zn(C2H3O2):3 NA
18	4859	EQUIPMENT BLANK	21410310508					EQBK		
19	4511	301-306	21411030501					SAMPLE		0.1% Methyl Red:3
20	0600	TWB-Q-1078, 002A	21411042405					SAMPLE		
21			DOC 1	50	50					Acetate Buffer:3
22			DOC 2							
23			DOC 3							5% NaOH (CLP):4
24			DOC 4							
25										1.0N NaOH:1,2,3
26										

Type of cyanide prep: CNC-Total=2, CNAC-Amenable=1, CNFR-Free=3, CNC-CLP=4
COMMENTS:

BALANCE ID: NA TEMP: 150C

9-7-12 DNM 11-6-14

LCS/MS SPIKE ID	9-5-8	CONC:	10 ppm			Analyst Review	DATE
LCS LOW VOL	100 µL	LCS HIGH VOL	900 µL	LCS CLP VOL	NA	DNM	11/5/14
MS WATER VOL	NA	MS SOLID VOL	NA				
						Secondary Review	DATE
SPIKE WITNESS						TRS	11/6/14

Revision 1, 08/10/2010

TRINITY ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Project Number: A012-109

Chain of Custody Number (1): MAFR20141021021

Facility: Melrose Air Force Range

Project Name / Site Name: 2014 Semiannual

Client Name: Trinity (850) 613-6800

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart, Jonathan Kramer

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Sample Analysis Requested (5): Number of containers	VOCs (8260B) 9	Explosives (8330) 0	Metals (Total & Diss) 6020A 0	Cyanide (9012A) 0	Mercury (7470A) 0	Nitrite, Nitrate (300.0) 2	Chloride, Sulfate (300.0) 0	Perchlorate (6860) 2	Alkalinity (2320B) 2	TDS (2540C) 0	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
MA01MW002		21OCT2014	1040		N		WG	10	X	X	X	X	X	X	X	X	X	X				A C
MA01MW002-c		21OCT2014	1040		TB		WQ	3	X													A C
MA01MW001		21OCT2014	1220		N		WG	10	X	X	X	X	X	X	X	X	X	X				A C
MA01MW004		21OCT2014	1100		N		WG	10	X	X	X	X	X	X	X	X	X	X				B C
MA01MW004-a		21OCT2014	1100		FD		WG	10	X	X	X	X	X	X	X	X	X	X				B C
MA01MW004-c		21OCT2014	1100		TB		WQ	3	X													B C
MA01MW003		21OCT2014	1226		N		WG	10	X	X	X	X	X	X	X	X	X	X				C C
MA01MW003-c		21OCT2014	1226		TB		WQ	3	X													C C

Client ID: 4747 - TRINITY Analysis & Development Corp.

SDG: 214102205

Due Date: 10/29/14

Comments: Diss metals field filtered 5980 93798958, 5980 93798947, 5980 93798936

Custody Transfers Prior to Receipt by Laboratory

	Relinquished by (Signed)	Date	Time	Received by (signed)	Date	Time
1.		10/21/14	1500			
2.	FEDEX					
3.						

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: No

Method of Shipment: FedEx

Analytical Lab: GCAL

Lab Recipient:

Shipped: No.: 3

Airbill Number: 2.7, 3.2, 1.60 E24

Delivery Location: Baton Rouge, LA

Delivery Date/Time:

1.) Chain of Custody Number = site name (e.g., SS125) and then date (yyyymmdd) collected + custody number (e.g. SS125-20110902-01)…September 2, 2011.

2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/11 = 01, if sampled again on 10/10/11 = 02, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Ground Water , WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS= Suface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ= Soil Blanks

5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

6.) Quality assurance samples are assigned by date (ddmmyy) and the number of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or ambient blank collected on May 10, 2011 in association with samples on the COC will be designated 10051101 in the Blank Lot Control Number field).

7.) Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c

Page 1 of 1

Project Number: A012-109

Chain of Custody Number (1): MAFR20141027O1

TRINITY ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Facility: Melrose Air Force Range

Project Name / Site Name: 2014 Semiannual

Client Name: Trinity (850) 613-6800

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart, Jonathan Kramer

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code[2]	Sample Number[3]	Sample Matrix[4]	Sample Analysis Requested[5]: Number of containers	VOCs (8260B)	Explosives (8330)	Metals (Total & Diss) 6020A	Cyanide (9012A)	Mercury (7470A)	Nitrite, Nitrate (300.0)	Chloride, Sulfate (300.0)	Pechrlorate (6860)	Alkalinity (2320B)	TDS (2540C)	Quality Assurance Samples[6]: Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
M114MW002		22OCT2014	0935		N	1	WG	10	X	X	X	X	X	X	X	X	X	X				A
M114MW002-c		22OCT2014	0935		TB	1	WQ	3	X													A
M114MW003		22OCT2014	1110		N	1	WG	10	X	X	X	X	X	X	X	X	X	X				A
M114MW004		22OCT2014	1025		N	1	WG	10	X	X	X	X	X	X	X	X	X	X				B
M114MW004-c		22OCT2014	1025		TB	1	WQ	3	X													B
M114MW001		22OCT2014	1235		N	1	WG	10	X	X	X	X	X	X	X	X	X	X				B

Client ID: 4747 - TRINITY Analysis & Development Corp.

SDG: 214102205

Due Date: 10/30/14

Comments: 5980 9379 8991 5980 9379 9005

9 10 1.9 1.2 E24

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1.	FedEx	10/23/14	1538			
2.	FedEx	10/23/14	940			
3.						

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: No

Method of Shipment: FedEx

Analytical Lab: GCAL

Lab Recipient:

Shipped: No.: 2

Airbill Number:

Delivery Location: Baton Rouge, LA

Delivery Date/Time:

1.) Chain of Custody Number = site name (e.g., SS125) and then date (yyyymmdd) collected + custody number (e.g. SS125-20110902-01)…September 2, 2011.

2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/11 = 01, if sampled again on 10/10/11 = 02, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Ground Water , WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS= Suface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ= Soil Blanks

5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

6.) Quality assurance samples are assigned by date (ddmmyy) and the number of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or ambient blank collected on May 10, 2011 in association with samples on the COC will be designated 10051101 in the Blank Lot Control Number field).

7.) Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c

TRINITY ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Project Number: A012-109

Chain of Custody Number (1): MAFR20141023O1

Facility: Melrose Air Force Range

Project Name / Site Name: 2014 Semiannual

Client Name: Trinity (850) 613-6800

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart, Jonathan Kramer

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Sample Analysis Requested (5): Number of containers	VOCs (8260B)	Explosives (8330)	Metals (Total & Diss) 6020A	Cyanide (9012A)	Mercury (7470A)	Nitrite, Nitrate (300.0)	Chloride, Sulfate (300.0)	Perchlorate (6860)	Alkalinity (2320B)	TDS (2540C)	Quality Assurance Samples (6): Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
MWQ-24		23 OCT 2014	0932		N	1	WG	10	X	X	X	X	X	X	X	X	X	X		15	QA	A
MWQ-24-MS		23 OCT 2014	0932		MS	1	WG	10	X	X	X	X	X	X	X	X	X	X		16 MS		A
MWQ-24-SD		23 OCT 2014	0932		SD	1	WG	10	X	X	X	X	X	X	X	X	X	X		MSD 17,	18 DUP	B
MWQ-24-C		23 OCT 2014	0937		TB	1	WQ	3	X											19		A
MA02MW001D		23 OCT 2014	1143		N	1	WG	10	X	X	X	X	X	X	X	X	X	X		20		B
MA02MW001D-C		23 OCT 2014	1143		TB	1	WQ	3	X											21		B

Client ID: 4747 - TRINITY Analysis & Development Corp.

SDG: 214102205

Due Date: 10/30/14

Comments: Dissolved metals were field filtered

2.4 E24
1.6 E24

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1.		10/24/14	1636			
2.	FedEx	10/24/14	9:35	Allison Fegan	10/24/14	9:35
3.						

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: No.
Method of Shipment: FedEx
Analytical Lab: GCAL
Lab Recipient:

Shipped: No.:
Airbill Number: 598093798970
Delivery Location: Baton Rouge, LA
Delivery Date/Time:

598093798969

1.) Chain of Custody Number = site name (e.g., SS125) and then date (yyyymmdd) collected + custody number (e.g. SS125-20110902-01)…September 2, 2011.

2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/11 = 01, if sampled again on 10/10/11 = 02, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Ground Water , WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS= Suface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ= Soil Blanks

5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

6.) Quality assurance samples are assigned by date (ddmmyy) and the number of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or ambient blank collected on May 10, 2011 in association with samples on the COC will be designated 10051101 in the Blank Lot Control Number field).

7.) Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c

GCAL ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIVING CHECKLIST

214102205

SAMPLE DELIVERY GROUP 214102205	
Client 4747 - TRINITY Analysis & Development Corp.	**Transport Method** FEDEX
Profile Number 195817	**Received By** Saucier, Charlotte M. Naquin, Allison
Line Item(s) 1 - Waters	**Receive Date(s)** 10/23/14 10/24/14 10/22/14

CHECKLIST	YES	NO	NA
Were all samples received using proper thermal preservation?	☑	☐	☐
When used, were all custody seals intact?	☑	☐	☐
Were all samples received in proper containers?	☑	☐	☐
Were all samples received using proper chemical preservation?	☑	☐	☐
Was preservative added to any container at the lab?	☐	☑	☐
Were all containers received in good condition?	☑	☐	☐
Were all VOA vials received with no head space?	☑	☐	☐
Do all sample labels match the Chain of Custody?	☑	☐	☐
Did the Chain of Custody list the sampling technician?	☑	☐	☐
Was the COC maintained i.e. all signatures, dates and time of receipt included?	☐	☑	☐

COOLERS

Airbill	Thermometer ID: E24	Temp(°C)
5980 9379 8958		2.7
5980 9379 8947		3.2
5980 9379 8936		1.6
5980 9379 8991		1.9
5980 9379 9005		1.2
5980 9379 8970		1.6
5980 9379 8969		2.4

DISCREPANCIES

None

LAB PRESERVATIONS

None

NOTES

214102205 633

ALS Environmental
ALS Group USA, Corp
1565 Jefferson Rd, Building 300, Suite 360
Rochester, NY 14623
T: 585-288-5380
F: 585-288-8475
www.alsglobal.com

November 10, 2014

Analytical Report for Service Request No: R1408409

Mr. Sean Hardin
Gulf Coast Analytical Labs
7979 GSRI Avenue
Baton Rouge, LA 70820

Laboratory Results for: Melrose Air Force Range/2014 Semiannual

Dear Mr. Hardin:

Enclosed are the results of the sample(s) submitted to our laboratory between October 22, 2014 and October 24, 2014. For your reference, these analyses have been assigned our service request number **R1408409**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7473. You may also contact me via email at Deb.Patton@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental

Deb Patton
Project Manager

ALS Environmental

Client:	Gulf Coast Analytical Laboratories	**Service Request No.:**	R1408409
Project:	Melrose	**Date Received:**	10/22-10/24/14
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS. This report contains analytical results for samples designated for Tier III. When appropriate to the method, method blank results have been reported with each analytical test. Additional quality control analyses reported herein include: Laboratory Control Sample (LCS). Any correspondence via e-mail or phone will follow this narrative page in the report.

Sample Receipt

Eleven water samples were received for analysis at ALS between 10/22-10/24/14. The samples were received in good condition. The samples were stored in a refrigerator between 1°C and 6°C upon receipt at the laboratory.

Hexavalent Chromium

All initial and continuing calibrations were compliant.

All Method Blanks were free of contamination.

The Laboratory Control Samples were within control limits.

No other analytical or quality control problems were encountered during analysis.

Approved by _____ **Date** 11/10/14

CASE NARRATIVE

This report contains analytical results for the following samples:
Service Request Number: R1408409

Lab ID	Client ID
R1408409-001	MA01MW002
R1408409-002	MA01MW001
R1408409-003	MA01MW004
R1408409-004	MA01MW004-a
R1408409-005	MA01MW003
R1408409-006	M114MW002
R1408409-007	M114MW003
R1408409-008	M114MW004
R1408409-009	M114MW001
R1408409-010	MWQ-24
R1408409-011	MA02MW001D

ALS Environmental

REPORT QUALIFIERS AND DEFINITIONS

U Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.

J Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).

B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.

E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.

E Organics- Concentration has exceeded the calibration range for that specific analysis.

D Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.

* Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.

H Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.

Spike was diluted out.

\+ Correlation coefficient for MSA is <0.995.

N Inorganics- Matrix spike recovery was outside laboratory limits.

N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.

S Concentration has been determined using Method of Standard Additions (MSA).

W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.

P Concentration >40% (25% for CLP) difference between the two GC columns.

C Confirmed by GC/MS

Q DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).

X See Case Narrative for discussion.

MRL Method Reporting Limit. Also known as:
LOQ Limit of Quantitation (LOQ)
The lowest concentration at which the method analyte may be reliably quantified under the method conditions.

MDL Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).

LOD Limit of Detection. A value at or above the MDL which has been verified to be detectable.

ND Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

ACCREDITED IN ACCORDANCE WITH nelac

Rochester Lab ID # for State Certifications[1]

NELAP Accredited	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Connecticut ID # PH0556	Nebraska Accredited	
Delaware Accredited	Nevada ID # NY-00032	North Carolina #676
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047		Virginia #460167

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Gulf Coast Analytical Labs	**Service Request:**	R1408409
Project:	Melrose Air Force Range/2014 Semiannual	**Date Collected:**	10/21/14 - 10/23/14
Sample Matrix:	Water	**Date Received:**	10/22/14 - 10/24/14
		Units:	µg/L
Analysis Method:	218.6 LL	**Basis:**	NA

Chromium, Hexavalent, Dissolved

Sample Name	Lab Code	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
MA01MW002	R1408409-001	**1.48**		0.040	0.028	2	NA	11/4/14 15:16	
MA01MW001	R1408409-002	**0.719**		0.020	0.014	1	NA	11/4/14 15:44	
MA01MW004	R1408409-003	**0.719**		0.020	0.014	1	NA	11/4/14 15:54	
MA01MW004-a	R1408409-004	**0.758**		0.020	0.014	1	NA	11/4/14 16:04	
MA01MW003	R1408409-005	**0.417**		0.020	0.014	1	NA	11/4/14 16:14	
M114MW002	R1408409-006	**1.71**		0.20	0.14	10	NA	11/6/14 16:13	
M114MW003	R1408409-007	**0.76**		0.20	0.14	10	NA	11/6/14 16:43	
M114MW004	R1408409-008	**1.40**		0.20	0.14	10	NA	11/6/14 17:54	
M114MW001	R1408409-009	**4.02**		0.20	0.14	10	NA	11/6/14 18:23	
MWQ-24	R1408409-010	**0.560**		0.020	0.014	1	NA	11/4/14 17:34	
MA02MW001D	R1408409-011	0.020	U	0.020	0.014	1	NA	11/4/14 18:03	
Method Blank	R1408409-MB1	0.020	U	0.020	0.014	1	NA	11/4/14 12:28	
Method Blank	R1408409-MB2	0.020	U	0.020	0.014	1	NA	11/4/14 17:04	
Method Blank	R1408409-MB3	0.020	U	0.020	0.014	1	NA	11/6/14 15:12	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Gulf Coast Analytical Labs
Project: Melrose Air Force Range/2014 Semiannual
Sample Matrix: Water

Service Request: R1408409
Date Collected: 10/23/14
Date Received: 10/24/14
Date Analyzed: 11/ 4/14

Matrix Spike Summary
General Chemistry Parameters

Sample Name: MWQ-24
Lab Code: R1408409-010

Units: µg/L
Basis: NA

Analytical Method: 218.6 LL

		MWQ-24MS Matrix Spike R1408409-010MS			MWQ-24DMS Duplicate Matrix Spike R1408409-010DMS					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Chromium, Hexavalent, Dissolved	0.560	0.763	0.200	101	0.759	0.200	99	90 - 110	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Gulf Coast Analytical Labs
Project: Melrose Air Force Range/2014 Semiannual
Sample Matrix: Water

Service Request: R1408409
Date Analyzed: 11/ 4/14

Lab Control Sample Summary
General Chemistry Parameters

Units: µg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R1408409-LCS1 Result	Spike Amount	% Rec	% Rec Limits
Chromium, Hexavalent, Dissolved	218.6 LL	0.202	0.200	101	90 - 110

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Gulf Coast Analytical Labs
Project: Melrose Air Force Range/2014 Semiannual
Sample Matrix: Water

Service Request: R1408409
Date Analyzed: 11/4/14

Lab Control Sample Summary
General Chemistry Parameters

Units: µg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R1408409-LCS2 Result	Spike Amount	% Rec	% Rec Limits
Chromium, Hexavalent, Dissolved	218.6 LL	0.202	0.200	101	90 - 110

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Gulf Coast Analytical Labs
Project: Melrose Air Force Range/2014 Semiannual
Sample Matrix: Water

Service Request: R1408409
Date Analyzed: 11/ 6/14

Lab Control Sample Summary
General Chemistry Parameters

Units: µg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R1408409-LCS3 Result	Spike Amount	% Rec	% Rec Limits
Chromium, Hexavalent, Dissolved	218.6 LL	0.191	0.200	95	90 - 110

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Gulf Coast Analytical Labs **Service Request:** R1408409

Project: Melrose Air Force Range/2014 Semiannual

Continuing Calibration Verification (CCV) Summary
Chromium, Hexavalent, Dissolved

Analytical Method: 218.6 LL **Units:** ppb

	Analysis Lot	Lab Code	Date Analyzed	True Value	Measured Value	Percent Recovery	Acceptance Limits
CCV1	419909	RQ1413678-03	11/4/14 12:15	0.500	0.516	103	95 - 105
CCV2	419909	RQ1413678-04	11/4/14 14:55	0.500	0.506	101	95 - 105
CCV3	419909	RQ1413678-05	11/4/14 16:54	0.500	0.515	103	95 - 105
CCV4	419910	RQ1413679-05	11/4/14 16:54	0.500	0.515	103	95 - 105
CCV5	419910	RQ1413679-06	11/4/14 18:13	0.500	0.504	101	95 - 105
CCV6	419910	RQ1413679-07	11/4/14 20:12	0.500	0.499	100	95 - 105
CCV7	419910	RQ1413679-08	11/4/14 21:21	0.500	0.516	103	95 - 105
CCV8	420136	RQ1413737-05	11/6/14 15:02	0.500	0.508	102	95 - 105
CCV9	420136	RQ1413737-06	11/6/14 17:03	0.500	0.499	100	95 - 105
CCV10	420136	RQ1413737-07	11/6/14 18:52	0.500	0.503	101	95 - 105

Client: Gulf Coast Analytical Labs **Service Request:** R1408409

Project: Melrose Air Force Range/2014 Semiannual

Continuing Calibration Blank (CCB) Summary
Chromium, Hexavalent, Dissolved

Analytical Method: 218.6 LL **Units:** µg/L

	Analysis Lot	Lab Code	Date Analyzed	MDL	MRL	Result	Q
CCB1	419909	RQ1413678-06	11/4/14 12:28	0.014	0.020	0.020	U
CCB2	419909	RQ1413678-07	11/4/14 15:05	0.014	0.020	0.020	U
CCB3	419909	RQ1413678-08	11/4/14 17:04	0.014	0.020	0.020	U
CCB4	419910	RQ1413679-09	11/4/14 17:04	0.014	0.020	0.020	U
CCB5	419910	RQ1413679-10	11/4/14 18:23	0.014	0.020	0.020	U
CCB6	419910	RQ1413679-11	11/4/14 20:22	0.014	0.020	0.020	U
CCB7	419910	RQ1413679-12	11/4/14 21:31	0.014	0.020	0.020	U
CCB8	420136	RQ1413737-08	11/6/14 15:12	0.014	0.020	0.020	U
CCB9	420136	RQ1413737-09	11/6/14 17:13	0.014	0.020	0.020	U
CCB10	420136	RQ1413737-10	11/6/14 19:03	0.014	0.020	0.020	U

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Page 1 of 1

Project Number: A012-109

Chain of Custody Number (1): MAFR20141021102

Facility: Melrose Air Force Range

Project Name / Site Name: 2014 Semiannual

Client Name: Trinity (850) 613-6800

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart, Jonathan Kramer

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code [2]	Sample Number [3]	Sample Matrix [4]	Sample Analysis Requested [5]: Number of containers	Sample Analysis Requested [5]: Chromium (VI) 218.6	Quality Assurance Samples [6]: Ambient Blank Lot Control Number	Quality Assurance Samples [6]: Equipment Blank Lot Control Number	Quality Assurance Samples [6]: Trip Blank Lot Control Number	Cooler ID
MA01MW002		21 OCT 2014	1040		N	1	WG	1	X				D
MA01MW001		21 OCT 2014	1220		N	1	WG	1	X				D
MA01MW004		21 OCT 2014	1100		N	1	WG	1	X				D
MA01MW004-a		21 OCT 2014	1100		FD	1	WG	1	X				D
MA01MW003		21 OCT 2014	1226		N	1	WG	1	X				D

Comments

Custody Transfers Prior to Receipt by Laboratory

	Relinquished by (Signed)	Date	Time	Received by (Signed)	Date	Time
1.		10/21/14	1500		10-22-14	10:45
2.						
3.						

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: No — Shipped: No.: 1

Method of Shipment: FedEx — Airbill Number:

Analytical Lab: ALS — Delivery Location:

Lab Recipient: — Delivery Date/Time:

1.) Chain of Custody Number = site name (e.g., SS125) and then date (yyyymmdd) collected + custody number (e.g. SS125-20110902-01)...September 2, 2011.

2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/11 = 01, if sampled again on 10/10/11 = 02, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Ground Water, WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS= Suface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ= Soil Blanks

5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

6.) Quality assurance samples are assigned by date (ddmmyy) and the number of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or ambient blank collected on May 10, 2011 in association with samples on the COC will be designated 10051101 in the Blank Lot Control Number field).

7.) Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c

R1408409 5
Gulf Coast Analytical Labs
Melrose Air Force Range

R1408409 5
Gulf Coast Analytical Labs
Melrose Air Force Range

Cooler Receipt and Preservation Check Form

Project/Client Trinity Analysis Folder Number R14-8409

Cooler received on 10-22-14 by: NE

COURIER: ALS UPS (FEDEX) VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	(Y)	N
2	**Custody papers** properly completed (ink, signed)?	(Y)	N
3	Did all bottles arrive in good **condition** (unbroken)?	(Y)	N
4	Circle: (**Wet Ice**) **Dry Ice** **Gel packs** present?	(Y)	N

5a	**Perchlorate** samples have required headspace?	Y	N	(NA)
5b	Did VOA vials, Alk,or Sulfide have sig* **bubbles**?	Y	N	(NA)
6	Where did the bottles originate?	(ALS/ROC)	CLIENT	
7	Soil VOA received as: Bulk Encore 5035set			(NA)

8. Temperature Readings Date 10-22-14 Time: 11:08 ID: IR#3 (IR#4) From: (Temp Blank) Sample Bottle

Observed Temp (°C)	3.4°						
Correction Factor (°C)	-0.1°						
Corrected Temp (°C)	3.3°						
Within 0-6°C?	(Y) N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: SM0 by AE on 10-22-14 at 11:13
5035 samples placed in storage location: _____ by _____ on _____ at _____

PC Secondary Review: _____

Cooler Breakdown: Date: 10/22/14 Time: 2003 by: DH

1. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? (YES) NO
2. Did all bottle labels and tags agree with custody papers? (YES) NO
3. Were correct containers used for the tests indicated? (YES) NO
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated (N/A)

Explain any discrepancies:

pH	Reagent	Yes	No	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3								
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add $Na_2S_2O_3$ (CN), ascorbic (phenol).					
	$Na_2S_2O_3$	-	-						
	ZnAcetate	-	-						
	HCl	**	**						

**Not to be tested before analysis -- pH tested and recorded by VOAs on a separate worksheet

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 62314-2440

Other Comments:

PC Secondary Review: _____

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

TRINITY ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Project Number: A012-109

Chain of Custody Number (1): MAFR2014102307

Facility: Melrose Air Force Range

Project Name / Site Name: 2014 Semiannual

Client Name: Trinity (850) 613-6800

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart, Jonathan Kramer

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code[2]	Sample Number[3]	Sample Matrix[4]	Sample Analysis Requested[5]: Number of containers	Chromium (VI) 218.6									Quality Assurance Samples[6]: Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
M114MW002		22 OCT 2014	0935		N	1	WG	1	x											C
M114MW003		22 OCT 2014	1110		N	1	WG	1	x											C
M114MW004		22 OCT 2014	1025		N	1	WG	1	x											C
M114MW001		22 OCT 2014	1235		N	1	WG	1	x											C

Comments

Custody Transfers Prior to Receipt by Laboratory

	Relinquished by (Signed)	Date	Time	Received by (signed)	Date	Time
1.	[signature]	10-23-14	1530	[signature]	10/23/14	0945
2.						
3.						

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:	No	Shipped: No.:	1
Method of Shipment:	FedEx	Airbill Number:	
Analytical Lab:	ALS	Delivery Location:	
Lab Recipient:		Delivery Date/Time:	

1.) Chain of Custody Number = site name (e.g., SS125) and then date (yyyymmdd) collected + custody number (e.g. SS125-20110902-01)...September 2, 2011.

2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/11 = 01, if sampled again on 10/10/11 = 02, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Ground Water, WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS= Suface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ= Soil Blanks

5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

6.) Quality assurance samples are assigned by date (ddmmyy) and the number of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or ambient blank collected on May 10, 2011 in association with samples on the COC will be designated 10051101 in the Blank Lot Control Number field).

7.) Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c

R1408409 5
Gulf Coast Analytical Labs
Melrose Air Force Range

R1408409 5
Gulf Coast Analytical Labs
Melrose Air Force Range

Cooler Receipt and Preservation Check Form

Project/Client GCAL / Trinity Folder Number R14-8409

Cooler received on 10/23/14 by: @

COURIER: ALS UPS (FEDEX) VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	Y (N)	5a	**Perchlorate** samples have required headspace?	Y N (NA)
2	**Custody papers** properly completed (ink, signed)?	(Y) N	5b	Did VOA vials, Alk,or Sulfide have sig* **bubbles**?	Y N (NA)
3	Did all bottles arrive in good **condition** (unbroken)?	(Y) N	6	Where did the bottles originate?	~~ALS/ROC~~ CLIENT
4	Circle: (Wet Ice) **Dry Ice Gel packs** present?	(Y) N	7	Soil VOA received as: Bulk Encore 5035set	(NA)

8. Temperature Readings Date: 10/23/14 Time: 1000 ID: (IR#3) IR#4 From: Temp Blank (Sample Bottle)

Observed Temp (°C)	5.4						
Correction Factor (°C)	-0.4						
Corrected Temp (°C)	5.0°						
Within 0-6°C?	(Y) N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: R-002 by @ on 10/23/14 at 1000
5035 samples placed in storage location: _____ by _____ on _____ at _____

PC Secondary Review: _____

Cooler Breakdown: Date: 10/23/14 Time: 1445 by: @

1. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? (YES) NO
2. Did all bottle labels and tags agree with custody papers? (YES) NO
3. Were correct containers used for the tests indicated? (YES) NO
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated (N/A)

Explain any discrepancies:

pH	Reagent	Yes	No	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3								
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add $Na_2S_2O_3$ (CN), ascorbic (phenol).					
	$Na_2S_2O_3$	-	-						
	ZnAcetate	-	-						
	HCl	**	**						

**Not to be tested before analysis -- pH tested and recorded by VOAs on a separate worksheet

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 062314-2AM

Other Comments:

Cr+6 Buffer : WC1400634 Exp. 9/15

PC Secondary Review: _____

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

Page 1 of 1

TRINITY ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Project Number: A012-109

Chain of Custody Number (1): MEF 2014/02303

Facility: Melrose Air Force Range

Project Name / Site Name: 2014 Semiannual

Client Name: Trinity (850) 613-6800

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart, Jonathan Kramer

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code [2]	Sample Number [3]	Sample Matrix [4]	Sample Analysis Requested [5]: Number of containers	Chromium (VI) 218.6									Quality Assurance Samples [6]: Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
MWQ-24		23 OCT 2014	0932		N	1	WG	1	X											C
MWQ-24MS		23 OCT 2014	0932		MS	1	WG	1	X											C
MWQ-24-SD		23 OCT 2014	0932		SD	1	WG	1	X											C
MA2MW0010		23 OCT 2014	1143		N	1	WG	1	X											C

Comments

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (signed)	Date	Time
1.		10/24/14	1630
2.			
3.			

	Received by (signed)	Date	Time
1.		10/24/14	
2.			0935
3.			

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: NO
Method of Shipment: FedEx
Analytical Lab: ALS
Lab Recipient:

Shipped: No.: 1
Airbill Number:
Delivery Location: Rochester, NY
Delivery Date/Time:

1.) Chain of Custody Number = site name (e.g., SS125) and then date (yyyymmdd) collected + custody number (e.g. SS125-20110902-01)…September 2, 2011.

2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/11 = 01, if sampled again on 10/10/11 = 02, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Ground Water , WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS= Suface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ= Soil Blanks

5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

6.) Quality assurance samples are assigned by date (ddmmyy) and the number of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or ambient blank collected on May 10, 2011 in association with samples on the COC will be designated 10051101 in the Blank Lot Control Number field).

7.) Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c

R1408409 5
Gulf Coast Analytical Labs
Melrose Air Force Range

R1408409 5
Gulf Coast Analytical Labs
Melrose Air Force Range

Cooler Receipt and Preservation Check Form

Project/Client GCAL / Trinity Folder Number R14-8409

Cooler received on 10/24/14 by: R

COURIER: ALS UPS (FEDEX) VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	(Y) N	5a	**Perchlorate** samples have required headspace?	Y N (NA)
2	**Custody papers** properly completed (ink, signed)?	(Y) N	5b	Did VOA vials, Alk,or Sulfide have sig* **bubbles**?	Y N (NA)
3	Did all bottles arrive in good **condition** (unbroken)?	(Y) N	6	Where did the bottles originate?	(ALS/ROC) CLIENT
4	Circle: (Wet Ice) **Dry Ice Gel packs** present?	(Y) N	7	Soil VOA received as: Bulk Encore 5035set	(NA)

8. Temperature Readings Date: 10/24/14 Time: 0950 ID: (IR#) IR#4 From: (Temp Blank) Sample Bottle

Observed Temp (°C)	2.1						
Correction Factor (°C)	+0.6						
Corrected Temp (°C)	2.7D						
Within 0-6°C?	(Y) N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: R-002 by (R) on 10/24/14 at 0950
5035 samples placed in storage location: _____ by _____ on _____ at _____

PC Secondary Review: _____

Cooler Breakdown: Date: 10/24/14 Time: 1736 by: R

1. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? (YES) NO
2. Did all bottle labels and tags agree with custody papers? (YES) NO
3. Were correct containers used for the tests indicated? (YES) NO
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated (N/A)

Explain any discrepancies:

pH	Reagent	Yes	No	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3								
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add $Na_2S_2O_3$ (CN), ascorbic (phenol).					
	$Na_2S_2O_3$	-	-						
	ZnAcetate	-	-						
	HCl	**	**						

**Not to be tested before analysis – pH tested and recorded by VOAs on a separate worksheet

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust: _____

Bottle lot numbers: A62314-2AA0

Other Comments:

Cr+6 Buffer: WC1400634 Exp. 9/15

PC Secondary Review: _____

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

November 11, 2014

Sean Hardin
GCAL LAB
7979 GSRI AVENUE
BATON ROUGE, LA 70820
TEL: (225) 769-4900
FAX (225) 767-5717

Order No.: 1410256

RE: Melrose/214102205

Dear Sean Hardin:

DHL Analytical, Inc. received 11 sample(s) on 10/28/2014 for the analyses presented in the following report.

There were no problems with the analyses and all data met requirements of DoD QSM Ver 4.2 and NELAC except where noted in the Case Narrative. All non-NELAC methods will be identified accordingly in the case narrative and all estimated uncertainties of test results are within method or EPA specifications.

If you have any questions regarding these tests results, please feel free to call. This report shall not be reproduced except in full without the written approval of DHL Analytical, Inc. Thank you for using DHL Analytical.

Sincerely,

John DuPont
General Manager

This report was performed under the accreditation of the State of Texas & DoD Laboratory Certification Number: T104704211-14-12 & DoD-ELAP #L14-26

Table of Contents

Miscellaneous Documents **3**

CaseNarrative 1410256 ..... **10**

WorkOrderSampleSummary 1410256 ..... **11**

PrepDatesReport 1410256 ..... **12**

AnalyticalDatesReport 1410256 ..... **13**

Analytical Report 1410256 ..... **14**

AnalyticalQCSummaryReport 1410256 ..... **25**

Sequence Report 1410256 ..... **28**

GCAL
ANALYTICAL LABORATORIES, LLC
7979 INNOVATION PARK DR, BATON ROUGE LA 70820-7402
(225) 769-4900 FAX (225) 767-5717

Chain of Custody Record

#1410256

Submitted by		Bill to	
Client:	Gulf Coast Analytical Labs	Client:	Gulf Coast Analytical Labs
Address:	7979 Innovation Park Dr. Baton Rouge LA 70820	Address:	7979 Innovation Park Dr. Baton Rouge LA 70820
Contact:	Sean Hardin	Contact:	Sean Hardin
Phone:	225-769-4900	Phone:	225-769-4900
Fax:	225-767-5717	Fax:	225-767-5717

P.O. Number: 14-0830

Project Name/Number: Melrose/214102205

Sampled By:

* Our P. O. Number must appear on the Invoice.

* Our Project Number must appear on the final report.

	Matrix	Date	Time (2400)	Comp	Grab	Sample Description	Preservatives	No. Containers	Analysis Requested: Perchlorate by 6860	Remarks(for GCAL use only. DO NOT include in final report):	Lab ID
01	W	10/21/2014	10:40		X	MA01MW002	NONE	1	X	21410220501	
02	W	10/21/2014	12:20		X	MA01MW001	NONE	1	X	21410220503	
03	W	10/21/2014	11:00		X	MA01MW004	NONE	1	X	21410220504	
04	W	10/21/2014	11:00		X	MA01MW004-a	NONE	1	X	21410220505	
05	W	10/21/2014	12:26		X	MA01MW003	NONE	1	X	21410220507	
06	W	10/22/2014	9:35		X	M114MW002	NONE	1	X	21410220509	
07	W	10/22/2014	11:10		X	M114MW003	NONE	1	X	21410220511	
08	W	10/22/2014	10:25		X	M114MW004	NONE	1	X	21410220512	
09	W	10/22/2014	12:35		X	M114MW001	NONE	1	X	21410220514	

Turn Around Time: ___ 24 - 48 hrs ___ 3 days ___ 1 week X standard other ___

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Sean Hardin	FedEX	10/27/14	17:00
Fed up		10/28/14	930

Note:

EDD Required: ERPIMS and EXCEL EDD

Please email results to sean.hardin@gcal.com

PLEASE RETURN ICE CHESTS TO 7979 Innovation Park Dr.

Rec temp 2.4 Thermometer used

Matrix: W = water, S=Soil, SD=Solid, L=Liquid, SL=Sludge, O=Oil, CT=Charcoal Tube, OVM=Organic Vapor Monitor, XT=XAD Tube, A=Air Bag, SUM=Summa Canister

GCAL
ANALYTICAL LABORATORIES, LLC

7979 INNOVATION PARK DR, BATON ROUGE LA 70820-7402
(225) 769-4900 FAX (225) 767-5717

Chain of Custody Record

#1410256

Submitted by
Client: Gulf Coast Analytical Labs
Address: 7979 Innovation Park Dr.
Baton Rouge LA 70820
Contact: Sean Hardin
Phone: 225-769-4900
Fax: 225-767-5717

Bill to
Client: Gulf Coast Analytical Labs
Address: 7979 Innovation Park Dr.
Baton Rouge LA 70820
Contact: Sean Hardin
Phone: 225-769-4900
Fax: 225-767-5717

* Our P. O. Number must appear on the Invoice.
* Our Project Number must appear on the final report.

P.O. Number: 14-0830
Project Name/Number: Melrose/214102205
Sampled By:

	Matrix	Date	Time (2400)	Comp	Grab	Sample Description	Pre-servatives	No. Containers	Perchlorate by 6860	Remarks(for GCAL use only. DO NOT include in final report):	Lab ID
10	W	10/23/2014	9:32		X	MWQ-24	NONE	1	X	21410220515	
	W	10/23/2014	9:32		X	MWQ-24-ms	NONE	1	X	21410220516	
	W	10/23/2014	9:32		X	MWQ-24-sd	NONE	1	X	21410220517	
11	W	10/23/2014	11:43		X	MA02MW001D	NONE	1	X	21410220520	

Turn Around Time: ___ 24 - 48 hrs ___ 3 days ___ 1 week X standard other ___

Relinquished by: (Signature) Sean Hardin	Received by: (Signature) FedEx	Date: 10/27/14	Time: 17:00
Relinquished by: (Signature)	Received by: (Signature)	Date: 10/28/14	Time: 931
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Note: EDD Required: ERPIMS and EXCEL EDD
Please emal results to sean.hardin@gcal.com
PLEASE RETURN ICE CHESTS TO 7979 Innovation Park Dr.

Matrix: W = water, S=Soil, SD=Solid, L=Liquid, SL=Sludge, O=Oil, CT=Charcoal Tube, OVM=Organic Vapor Monitor, XT=XAD Tube, A=Air Bag, SUM=Summa Canister

ORIGIN ID:OPLA (225) 769-4900
CHARLOTTE SAUCIER
GULF COAST ANALYTICAL LABS INC
7979 INNOVATION DR

BATON ROUGE, LA 70820
UNITED STATES US

SHIP DATE: 27OCT14
ACTWGT: 30.0 LB MAN
CAD: 0291381/CAFE2704

BILL SENDER

TO JOHN DUPONT
DHL
2300 DOUBLE CREEK DRIVE

ROUND ROCK TX 78664
(512) 388-8222 REF:
INV:
PO: DEPT:

FedEx Express

TRK# 0201 5980 9380 0790

TUE - 28 OCT 10:30A
PRIORITY OVERNIGHT

XH BSMA

78664
TX-US AUS

Part # 156148-434 NRIT 02-07

GCAL ANALYTICAL LABORATORIES LLC

CUSTODY SEAL

Date Sealed: 10/28/14

This package conforms to the conditions and limitations specified in 49 CFR 173.4

Sealed By: SMH

RT 513 1
FZ B28
0790

DHL Analytical, Inc.

Sample Receipt Checklist

Client Name GCAL LAB

Work Order Number 1410256

Date Received: 10/28/2014

Received by JB

Checklist completed by: Signature 10/28/2014 Date

Reviewed by Initials 10/28/2014 Date

Carrier name FedEx 1day

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	2.4 °C
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH<2 acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted?		Checked by
Water - ph>9 (S) or ph>12 (CN) acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted?		Checked by

Any No response must be detailed in the comments section below.

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

DHL Analytical, Inc.

Laboratory Review Checklist: Reportable Data

Project Name: Melrose/214102205	**Date: 11/11/2014**
Reviewer Name: Angie O'Donnell	**Laboratory Work Order: 1410256**
Prep Batch Number(s): See Prep Dates Report	**Run Batch:** See Analytical Dates Report

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Chain-of-Custody (C-O-C)					
R1	OI	**1)** Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	**X**				**R1-01**
		2) Were all departures from standard conditions described in an exception report?			**X**		
R2	OI	**Sample and Quality Control (QC) Identification**					
		1) Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	**X**				
		2) Are all laboratory ID numbers cross-referenced to the corresponding QC data?	**X**				
R3	OI	**Test Reports**					
		1) Were all samples prepared and analyzed within holding times?	**X**				
		2) Other than those results < MQL, were all other raw values bracketed by calibration standards?	**X**				
		3) Were calculations checked by a peer or supervisor?	**X**				
		4) Were all analyte identifications checked by a peer or supervisor?	**X**				
		5) Were sample quantitation limits reported for all analytes not detected?	**X**				
		6) Were all results for soil and sediment samples reported on a dry weight basis?			**X**		
		7) Were % moisture (or solids) reported for all soil and sediment samples?			**X**		
		8) If required for the project, TICs reported?			**X**		
R4	O	**Surrogate Recovery Data**					
		1) Were surrogates added prior to extraction?			**X**		
		2) Were surrogate percent recoveries in all samples within the laboratory QC limits?			**X**		
R5	OI	**Test Reports/Summary Forms for Blank Samples**					
		1) Were appropriate type(s) of blanks analyzed?	**X**				
		2) Were blanks analyzed at the appropriate frequency?	**X**				
		3) Where method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	**X**				
		4) Were blank concentrations < MQL?	**X**				
R6	OI	**Laboratory Control Samples (LCS):**					
		1) Were all COCs included in the LCS?	**X**				
		2) Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	**X**				
		3) Were LCSs analyzed at the required frequency?	**X**				
		4) Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	**X**				
		5) Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	**X**				
		6) Was the LCSD RPD within QC limits (if applicable)?			**X**		
R7	OI	**Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Data**					
		1) Were the project/method specified analytes included in the MS and MSD?	**X**				
		2) Were MS/MSD analyzed at the appropriate frequency?	**X**				
		3) Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	**X**				
		4) Were MS/MSD RPDs within laboratory QC limits?	**X**				
R8	OI	**Analytical Duplicate Data**					
		1) Were appropriate analytical duplicates analyzed for each matrix?			**X**		
		2) Were analytical duplicates analyzed at the appropriate frequency?			**X**		
		3) Were RPDs or relative standard deviations within the laboratory QC limits?			**X**		
R9	OI	**Method Quantitation Limits (MQLs):**					
		1) Are the MQLs for each method analyte included in the laboratory data package?	**X**				
		2) Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	**X**				
		3) Are unadjusted MQLs included in the laboratory data package?	**X**				
R10	OI	**Other Problems/Anomalies**					
		1) Are all known problems/anomalies/special conditions noted in this LRC and ER?	**X**				
		2) Were all necessary corrective actions performed for the reported data?	**X**				
		3) Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	**X**				

1 Items identified by the letter "R" should be included in the laboratory data package submitted to the TCEQ in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).
3 NA = Not applicable.
4 NR = Not Reviewed.
5 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

DHL Analytical, Inc.
Laboratory Review Checklist (continued): Supporting Data

Project Name: Melrose/214102205	**Date: 11/11/2014**
Reviewer Name: Angie O'Donnell	**Laboratory Work Order: 1410256**

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial Calibration (ICAL)**					
		1) Were response factors and/or relative response factors for each analyte within QC limits?	**X**				
		2) Were percent RSDs or correlation coefficient criteria met?	**X**				
		3) Was the number of standards recommended in the method used for all analytes?	**X**				
		4) Were all points generated between the lowest and highest standard used to calculate the curve?	**X**				
		5) Are ICAL data available for all instruments used?	**X**				
		6) Has the initial calibration curve been verified using an appropriate second source standard?	**X**				
S2	OI	**Initial and Continuing calibration Verification (ICCV and CCV) and Continuing Calibration blank (CCB)**					
		1) Was the CCV analyzed at the method-required frequency?	**X**				
		2) Were percent differences for each analyte within the method-required QC limits?	**X**				
		3) Was the ICAL curve verified for each analyte?	**X**				
		4) Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			**X**		
S3	O	**Mass Spectral Tuning**					
		1) Was the appropriate compound for the method used for tuning?	**X**				
		2) Were ion abundance data within the method-required QC limits?	**X**				
S4	O	**Internal Standards (IS)**					
		1) Were IS area counts and retention times within the method-required QC limits?	**X**				
S5	OI	**Raw Data (NELAC section 1 appendix A glossary, and section 5.12)**					
		1) Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	**X**				
		2) Were data associated with manual integrations flagged on the raw data?	**X**				
S6	O	**Dual Column Confirmation**					
		1) Did dual column confirmation results meet the method-required QC?			**X**		
S7	O	**Tentatively Identified Compounds (TICs)**					
		1) If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			**X**		
S8	I	**Interference Check Sample (ICS) Results**					
		1) Were percent recoveries within method QC limits?			**X**		
S9	I	**Serial Dilutions, Post Digestion Spikes, and Method of Standard Additions**					
		1) Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			**X**		
S10	OI	**Method Detection Limit (MDL) Studies**					
		1) Was a MDL study performed for each reported analyte?	**X**				
		2) Is the MDL either adjusted or supported by the analysis of DCSs?	**X**				
S11	OI	**Proficiency Test Reports**					
		1) Was the lab's performance acceptable on the applicable proficiency tests or evaluation studies?	**X**				
S12	OI	**Standards Documentation**					
		1) Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	**X**				
S13	OI	**Compound/Analyte Identification Procedures**					
		1) Are the procedures for compound/analyte identification documented?	**X**				
S14	OI	**Demonstration of Analyst Competency (DOC)**					
		1) Was DOC conducted consistent with NELAC Chapter 5C?	**X**				
		2) Is documentation of the analyst's competency up-to-date and on file?	**X**				
S15	OI	**Verification/Validation Documentation for Methods (NELAC Chap 5)**					
		1) Are all the methods used to generate the data documented, verified, and validated, where applicable?	**X**				
S16	OI	**Laboratory Standard Operating Procedures (SOPs)**					
		1) Are laboratory SOPs current and on file for each method performed?	**X**				

1 Items identified by the letter "R" should be included in the laboratory data package submitted to the TCEQ in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).
3 NA = Not applicable.
4 NR = Not Reviewed.
5 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Data Package Signature Page

This data package consists of:

This signature page, the laboratory review checklist, and the following reportable data:

R1 Field chain-of-custody documentation;
R2 Sample identification cross-reference;
R3 Test reports (analytical data sheets) for each environmental sample that includes:
  a) Items consistent with NELAC 5.13
  b) dilution factors,
  c) preparation methods,
  d) cleanup methods, and
  e) if required for the project, tentatively identified compounds (TICs).
R4 Surrogate recovery data including:
  a) Calculated recovery (%R), and
  b) The laboratory's surrogate QC limits.
R5 Test reports/summary forms for blank samples;
R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  a) LCS spiking amounts,
  b) Calculated %R for each analyte, and
  c) The laboratory's LCS QC limits.
R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a) Samples associated with the MS/MSD clearly identified,
  b) MS/MSD spiking amounts,
  c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d) Calculated %Rs and relative percent differences (RPDs), and
  e) The laboratory's MS/MSD QC limits
R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  a) the amount of analyte measured in the duplicate,
  b) the calculated RPD, and
  c) the laboratory's QC limits for analytical duplicates.
R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;
R10 Other problems or anomalies.

The Exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

Release Statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

John DuPont – General Manager

Scott Schroeder – Technical Director

Signature

11/11/14

Date

DHL Analytical, Inc. **Date:** *11-Nov-14*

CLIENT: GCAL LAB
Project: Melrose/214102205
Lab Order: 1410256

CASE NARRATIVE

This case narrative describes abnormalities and deviations that may affect the results and summarizes all known issues that need to be highlighted for the data user to assess the results. This case narrative and the report contents are compliant with DoD QSM Ver 4.2 and NELAC. The "U" flag , in the Analytical Report, indicates the results for that sample are nondetect.

Samples were analyzed using the methods outlined in the following references:

Method E332.0/SW6860 - Perchlorate Analysis (Parameter is ELAP Accredited but not NELAC Certified)

Exception Report R1-01

The samples were received on and log-in performed on 10/28/2014. A total of 11 samples were received and analyzed. The samples arrived in good condition and were properly packaged.

A summary of project communication follows:

Request for quote was sent to DHL Analytical from the client, via email on 5/5/11 and the quote was sent to client via email on 5/5/11. Email for work approved by both parties on 5/18/11 with P.O number 12-0969.

Client sent samples in own containers.

This sample delivery group arrived at DHL Analytical 10/28/2014. Sample summary sent via email from Log-in to client on 10/28/2014 and is kept in the project folder.

DHL project manager/qa staff discussed with client the following issues:
via email on 11/27/2014 - between GCAL and DHL, discussing arrival of samples.

DHL Analytical, Inc.

Date: *11-Nov-14*

CLIENT: GCAL LAB
Project: Melrose/214102205
Lab Order: 1410256

Work Order Sample Summary

Lab Smp ID	Client Sample ID	Tag Number	Date Collected	Date Recved
1410256-01	MA01MW002		10/21/14 10:40 AM	10/28/2014
1410256-02	MA01MW001		10/21/14 12:20 PM	10/28/2014
1410256-03	MA01MW004		10/21/14 11:00 AM	10/28/2014
1410256-04	MA01MW004-a		10/21/14 11:00 AM	10/28/2014
1410256-05	MA01MW003		10/21/14 12:26 PM	10/28/2014
1410256-06	M114MW002		10/22/14 09:35 AM	10/28/2014
1410256-07	M114MW003		10/22/14 11:10 AM	10/28/2014
1410256-08	M114MW004		10/22/14 10:25 AM	10/28/2014
1410256-09	M114MW001		10/22/14 12:35 PM	10/28/2014
1410256-10	MWQ-24		10/23/14 09:32 AM	10/28/2014
1410256-11	MA02MW001D		10/23/14 11:43 AM	10/28/2014

Lab Order: 1410256
Client: GCAL LAB
Project: Melrose/214102205

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1410256-01A	MA01MW002	10/21/14 10:40 AM	Aqueous	SW6860	Perchlorate Prep	11/05/14 10:17 AM	66412
1410256-02A	MA01MW001	10/21/14 12:20 PM	Aqueous	SW6860	Perchlorate Prep	11/05/14 10:17 AM	66412
1410256-03A	MA01MW004	10/21/14 11:00 AM	Aqueous	SW6860	Perchlorate Prep	11/05/14 10:17 AM	66412
1410256-04A	MA01MW004-a	10/21/14 11:00 AM	Aqueous	SW6860	Perchlorate Prep	11/05/14 10:17 AM	66412
1410256-05A	MA01MW003	10/21/14 12:26 PM	Aqueous	SW6860	Perchlorate Prep	11/05/14 10:17 AM	66412
1410256-06A	M114MW002	10/22/14 09:35 AM	Aqueous	SW6860	Perchlorate Prep	11/05/14 10:17 AM	66412
1410256-07A	M114MW003	10/22/14 11:10 AM	Aqueous	SW6860	Perchlorate Prep	11/05/14 10:17 AM	66412
1410256-08A	M114MW004	10/22/14 10:25 AM	Aqueous	SW6860	Perchlorate Prep	11/05/14 10:17 AM	66412
1410256-09A	M114MW001	10/22/14 12:35 PM	Aqueous	SW6860	Perchlorate Prep	11/05/14 10:17 AM	66412
1410256-10A	MWQ-24	10/23/14 09:32 AM	Aqueous	SW6860	Perchlorate Prep	11/05/14 10:17 AM	66412
1410256-11A	MA02MW001D	10/23/14 11:43 AM	Aqueous	SW6860	Perchlorate Prep	11/05/14 10:17 AM	66412
	MA02MW001D	10/23/14 11:43 AM	Aqueous	SW6860	Perchlorate Prep	11/05/14 10:17 AM	66412

Lab Order: 1410256
Client: GCAL LAB
Project: Melrose/214102205

ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1410256-01A	MA01MW002	Aqueous	SW6860	Perchlorate - Water	66412	1	11/06/14 10:59 AM	ICMS2_141106A
1410256-02A	MA01MW001	Aqueous	SW6860	Perchlorate - Water	66412	1	11/06/14 11:15 AM	ICMS2_141106A
1410256-03A	MA01MW004	Aqueous	SW6860	Perchlorate - Water	66412	1	11/06/14 11:31 AM	ICMS2_141106A
1410256-04A	MA01MW004-a	Aqueous	SW6860	Perchlorate - Water	66412	1	11/06/14 11:47 AM	ICMS2_141106A
1410256-05A	MA01MW003	Aqueous	SW6860	Perchlorate - Water	66412	1	11/06/14 12:03 PM	ICMS2_141106A
1410256-06A	M114MW002	Aqueous	SW6860	Perchlorate - Water	66412	1	11/06/14 12:19 PM	ICMS2_141106A
1410256-07A	M114MW003	Aqueous	SW6860	Perchlorate - Water	66412	1	11/06/14 12:35 PM	ICMS2_141106A
1410256-08A	M114MW004	Aqueous	SW6860	Perchlorate - Water	66412	1	11/06/14 12:52 PM	ICMS2_141106A
1410256-09A	M114MW001	Aqueous	SW6860	Perchlorate - Water	66412	1	11/06/14 01:08 PM	ICMS2_141106A
1410256-10A	MWQ-24	Aqueous	SW6860	Perchlorate - Water	66412	1	11/06/14 01:24 PM	ICMS2_141106A
1410256-11A	MA02MW001D	Aqueous	SW6860	Perchlorate - Water	66412	5	11/07/14 10:30 AM	ICMS2_141106A
	MA02MW001D	Aqueous	SW6860	Perchlorate - Water	66412	1	11/06/14 03:00 PM	ICMS2_141106A

DHL Analytical, Inc.

Date: *11-Nov-14*

CLIENT:	GCAL LAB	**Client Sample ID:**	MA01MW002
Project:	Melrose/214102205	**Lab ID:**	1410256-01
Project No:		**Collection Date:**	10/21/14 10:40 AM
Lab Order:	1410256	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PERCHLORATE - WATER		**SW6860**					Analyst: **AS**
Perchlorate	0.00151	0.000100	0.000300	N	mg/L	1	11/06/14 10:59 AM
IS: Perchlorate_107	95.6	0	50-150	N	%REC	1	11/06/14 10:59 AM

Qualifiers:

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

DHL Analytical, Inc.

Date: *11-Nov-14*

CLIENT:	GCAL LAB	**Client Sample ID:**	MA01MW001
Project:	Melrose/214102205	**Lab ID:**	1410256-02
Project No:		**Collection Date:**	10/21/14 12:20 PM
Lab Order:	1410256	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PERCHLORATE - WATER		**SW6860**					Analyst: **AS**
Perchlorate	0.000308	0.000100	0.000300	N	mg/L	1	11/06/14 11:15 AM
IS: Perchlorate_107	94.3	0	50-150	N	%REC	1	11/06/14 11:15 AM

Qualifiers:

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

DHL Analytical, Inc.

Date: *11-Nov-14*

CLIENT:	GCAL LAB	**Client Sample ID:**	MA01MW004
Project:	Melrose/214102205	**Lab ID:**	1410256-03
Project No:		**Collection Date:**	10/21/14 11:00 AM
Lab Order:	1410256	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PERCHLORATE - WATER		**SW6860**					Analyst: **AS**
Perchlorate	0.00381	0.000100	0.000300	N	mg/L	1	11/06/14 11:31 AM
IS: Perchlorate_107	94.3	0	50-150	N	%REC	1	11/06/14 11:31 AM

Qualifiers:	*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
	C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
	E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
	MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
	RL	Reporting Limit	S	Spike Recovery outside control limits
	N	Parameter not NELAC certified		

DHL Analytical, Inc.

Date: *11-Nov-14*

CLIENT:	GCAL LAB	**Client Sample ID:**	MA01MW004-a
Project:	Melrose/214102205	**Lab ID:**	1410256-04
Project No:		**Collection Date:**	10/21/14 11:00 AM
Lab Order:	1410256	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PERCHLORATE - WATER		**SW6860**					Analyst: **AS**
Perchlorate	0.00377	0.000100	0.000300	N	mg/L	1	11/06/14 11:47 AM
IS: Perchlorate_107	94.2	0	50-150	N	%REC	1	11/06/14 11:47 AM

Qualifiers:

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

DHL Analytical, Inc.

Date: *11-Nov-14*

CLIENT:	GCAL LAB	**Client Sample ID:**	MA01MW003
Project:	Melrose/214102205	**Lab ID:**	1410256-05
Project No:		**Collection Date:**	10/21/14 12:26 PM
Lab Order:	1410256	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PERCHLORATE - WATER		**SW6860**					Analyst: **AS**
Perchlorate	0.000335	0.000100	0.000300	N	mg/L	1	11/06/14 12:03 PM
IS: Perchlorate_107	95.9	0	50-150	N	%REC	1	11/06/14 12:03 PM

Qualifiers:	*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
	C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
	E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
	MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
	RL	Reporting Limit	S	Spike Recovery outside control limits
	N	Parameter not NELAC certified		

DHL Analytical, Inc.

Date: *11-Nov-14*

CLIENT:	GCAL LAB	**Client Sample ID:**	M114MW002
Project:	Melrose/214102205	**Lab ID:**	1410256-06
Project No:		**Collection Date:**	10/22/14 09:35 AM
Lab Order:	1410256	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PERCHLORATE - WATER		**SW6860**					Analyst: **AS**
Perchlorate	0.00229	0.000100	0.000300	N	mg/L	1	11/06/14 12:19 PM
IS: Perchlorate_107	60.7	0	50-150	N	%REC	1	11/06/14 12:19 PM

Qualifiers:

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

DHL Analytical, Inc.

Date: *11-Nov-14*

CLIENT:	GCAL LAB	**Client Sample ID:**	M114MW003
Project:	Melrose/214102205	**Lab ID:**	1410256-07
Project No:		**Collection Date:**	10/22/14 11:10 AM
Lab Order:	1410256	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PERCHLORATE - WATER		**SW6860**					Analyst: **AS**
Perchlorate	0.00338	0.000100	0.000300	N	mg/L	1	11/06/14 12:35 PM
IS: Perchlorate_107	51.0	0	50-150	N	%REC	1	11/06/14 12:35 PM

Qualifiers:

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

DHL Analytical, Inc.

Date: *11-Nov-14*

CLIENT:	GCAL LAB	**Client Sample ID:**	M114MW004
Project:	Melrose/214102205	**Lab ID:**	1410256-08
Project No:		**Collection Date:**	10/22/14 10:25 AM
Lab Order:	1410256	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PERCHLORATE - WATER		**SW6860**					Analyst: **AS**
Perchlorate	0.00233	0.000100	0.000300	N	mg/L	1	11/06/14 12:52 PM
IS: Perchlorate_107	50.2	0	50-150	N	%REC	1	11/06/14 12:52 PM

Qualifiers:

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

DHL Analytical, Inc.

Date: *11-Nov-14*

CLIENT:	GCAL LAB	**Client Sample ID:**	M114MW001
Project:	Melrose/214102205	**Lab ID:**	1410256-09
Project No:		**Collection Date:**	10/22/14 12:35 PM
Lab Order:	1410256	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PERCHLORATE - WATER		**SW6860**					Analyst: **AS**
Perchlorate	0.00301	0.000100	0.000300	N	mg/L	1	11/06/14 01:08 PM
IS: Perchlorate_107	52.5	0	50-150	N	%REC	1	11/06/14 01:08 PM

Qualifiers:	*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
	C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
	E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
	MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
	RL	Reporting Limit	S	Spike Recovery outside control limits
	N	Parameter not NELAC certified		

DHL Analytical, Inc.

Date: *11-Nov-14*

CLIENT:	GCAL LAB	**Client Sample ID:**	MWQ-24
Project:	Melrose/214102205	**Lab ID:**	1410256-10
Project No:		**Collection Date:**	10/23/14 09:32 AM
Lab Order:	1410256	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PERCHLORATE - WATER		**SW6860**					Analyst: **AS**
Perchlorate	0.000135	0.000100	0.000300	JN	mg/L	1	11/06/14 01:24 PM
IS: Perchlorate_107	101	0	50-150	N	%REC	1	11/06/14 01:24 PM

Qualifiers:

*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
RL	Reporting Limit	S	Spike Recovery outside control limits
N	Parameter not NELAC certified		

DHL Analytical, Inc.

Date: *11-Nov-14*

CLIENT:	GCAL LAB	**Client Sample ID:**	MA02MW001D
Project:	Melrose/214102205	**Lab ID:**	1410256-11
Project No:		**Collection Date:**	10/23/14 11:43 AM
Lab Order:	1410256	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PERCHLORATE - WATER		**SW6860**					Analyst: **AS**
Perchlorate	0.0149	0.000500	0.00150	N	mg/L	5	11/07/14 10:30 AM
IS: Perchlorate_107	94.1	0	50-150	N	%REC	5	11/07/14 10:30 AM

Qualifiers:	*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
	C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
	E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
	MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
	RL	Reporting Limit	S	Spike Recovery outside control limits
	N	Parameter not NELAC certified		

CLIENT: GCAL LAB
Work Order: 1410256
Project: Melrose/214102205

ANALYTICAL QC SUMMARY REPORT

RunID: ICMS2_141106A

The QC data in batch 66412 applies to the following samples: 1410256-01A, 1410256-02A, 1410256-03A, 1410256-04A, 1410256-05A, 1410256-06A, 1410256-07A, 1410256-08A, 1410256-09A, 1410256-10A, 1410256-11A

Sample ID **MB-66412** Batch ID: **66412** TestNo: **SW6860** Units: **mg/L**
SampType: **MBLK** Run ID: **ICMS2_141106A** Analysis Date: **11/6/2014 10:27:24 AM** Prep Date: **11/5/2014**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.000100	0.000300								NU
IS: Perchlorate_107	0.00101		0.00100		115	50	150			N

Sample ID **LCS-66412** Batch ID: **66412** TestNo: **SW6860** Units: **mg/L**
SampType: **LCS** Run ID: **ICMS2_141106A** Analysis Date: **11/6/2014 10:43:29 AM** Prep Date: **11/5/2014**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.000315	0.000300	0.000300	0	105	85	115			N
IS: Perchlorate_107	0.00101		0.00100		119	50	150			N

Sample ID **1410256-10AMS** Batch ID: **66412** TestNo: **SW6860** Units: **mg/L**
SampType: **MS** Run ID: **ICMS2_141106A** Analysis Date: **11/6/2014 1:40:16 PM** Prep Date: **11/5/2014**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.000432	0.000300	0.000300	0.000135	99.0	85	115			N
IS: Perchlorate_107	0.00101		0.00100		105	50	150			N

Sample ID **1410256-10AMSD** Batch ID: **66412** TestNo: **SW6860** Units: **mg/L**
SampType: **MSD** Run ID: **ICMS2_141106A** Analysis Date: **11/6/2014 1:56:20 PM** Prep Date: **11/5/2014**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.000421	0.000300	0.000300	0.000135	95.3	85	115	2.60	20	N
IS: Perchlorate_107	0.00101		0.00100		106	50	150	0	0	N

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAC certified

CLIENT: GCAL LAB
Work Order: 1410256
Project: Melrose/214102205

ANALYTICAL QC SUMMARY REPORT

RunID: ICMS2_141106A

Sample ID **ICV-141106**	Batch ID: **R76214**	TestNo: **SW6860**	Units: **mg/L**
SampType: **ICV**	Run ID: **ICMS2_141106A**	Analysis Date: **11/6/2014 9:39:12 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.00189	0.000300	0.00200	0	94.6	85	115			N
IS: Perchlorate_107	0.00100		0.00100		110	50	150			N

Sample ID **LCVL1-141106**	Batch ID: **R76214**	TestNo: **SW6860**	Units: **mg/L**
SampType: **LCVL**	Run ID: **ICMS2_141106A**	Analysis Date: **11/6/2014 9:55:16 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.000228	0.000300	0.000200	0	114	70	130			N
IS: Perchlorate_107	0.00100		0.00100		113	50	150			N

Sample ID **ICS-141106**	Batch ID: **R76214**	TestNo: **SW6860**	Units: **mg/L**
SampType: **ICS**	Run ID: **ICMS2_141106A**	Analysis Date: **11/6/2014 10:11:20 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.000295	0.000300	0.000300	0	98.3	70	130			N
IS: Perchlorate_107	0.00100		0.00100		90.1	50	150			N

Sample ID **CCV1-141106**	Batch ID: **R76214**	TestNo: **SW6860**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICMS2_141106A**	Analysis Date: **11/6/2014 2:12:25 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.00498	0.000300	0.00500	0	99.6	85	115			N
IS: Perchlorate_107	0.00100		0.00100		107	50	150			N

Sample ID **LCVL2-141106**	Batch ID: **R76214**	TestNo: **SW6860**	Units: **mg/L**
SampType: **LCVL**	Run ID: **ICMS2_141106A**	Analysis Date: **11/6/2014 2:28:29 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.000255	0.000300	0.000200	0	128	70	130			N
IS: Perchlorate_107	0.00100		0.00100		117	50	150			N

Sample ID **ICV-141107**	Batch ID: **R76214**	TestNo: **SW6860**	Units: **mg/L**
SampType: **ICV**	Run ID: **ICMS2_141106A**	Analysis Date: **11/7/2014 9:25:48 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.00190	0.000300	0.00200	0	95.2	85	115			N
IS: Perchlorate_107	0.00100		0.00100		122	50	150			N

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAC certified

CLIENT: GCAL LAB
Work Order: 1410256
Project: Melrose/214102205

ANALYTICAL QC SUMMARY REPORT

RunID: ICMS2_141106A

Sample ID **LCVL1-141107**	Batch ID: **R76214**	TestNo: **SW6860**	Units: **mg/L**
SampType: **LCVL**	Run ID: **ICMS2_141106A**	Analysis Date: **11/7/2014 9:41:52 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.000231	0.000300	0.000200	0	116	70	130			N
IS: Perchlorate_107	0.00100		0.00100		127	50	150			N

Sample ID **ICS-141107**	Batch ID: **R76214**	TestNo: **SW6860**	Units: **mg/L**
SampType: **ICS**	Run ID: **ICMS2_141106A**	Analysis Date: **11/7/2014 9:57:57 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.000320	0.000300	0.000300	0	107	70	130			N
IS: Perchlorate_107	0.00100		0.00100		105	50	150			N

Sample ID **CCV1-141107**	Batch ID: **R76214**	TestNo: **SW6860**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICMS2_141106A**	Analysis Date: **11/7/2014 10:46:09 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.00500	0.000300	0.00500	0	99.9	85	115			N
IS: Perchlorate_107	0.00100		0.00100		120	50	150			N

Sample ID **LCVL2-141107**	Batch ID: **R76214**	TestNo: **SW6860**	Units: **mg/L**
SampType: **LCVL**	Run ID: **ICMS2_141106A**	Analysis Date: **11/7/2014 11:02:14 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Perchlorate	0.000256	0.000300	0.000200	0	128	70	130			N
IS: Perchlorate_107	0.00100		0.00100		134	50	150			N

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAC certified

Lab Order: 1410256
Client: GCAL LAB
Project: Melrose/214102205

Sequence Report

Run ID: ICMS2_141106A

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date	Matrix
LRB1-141106	-----	SW6860	R76214	1	11/6/2014 9:23:07 AM		A
ICV-141106	-----	SW6860	R76214	1	11/6/2014 9:39:12 AM		A
LCVL1-141106	-----	SW6860	R76214	1	11/6/2014 9:55:16 AM		A
ICS-141106	-----	SW6860	R76214	1	11/6/2014 10:11:20 AM		A
MB-66412	-----	SW6860	66412	1	11/6/2014 10:27:24 AM	11/5/2014 10:17:32 AM	A
LCS-66412	-----	SW6860	66412	1	11/6/2014 10:43:29 AM	11/5/2014 10:17:32 AM	A
1410256-01A	MA01MW002	SW6860	66412	1	11/6/2014 10:59:33 AM	11/5/2014 10:17:32 AM	A
1410256-02A	MA01MW001	SW6860	66412	1	11/6/2014 11:15:37 AM	11/5/2014 10:17:32 AM	A
1410256-03A	MA01MW004	SW6860	66412	1	11/6/2014 11:31:42 AM	11/5/2014 10:17:32 AM	A
1410256-04A	MA01MW004-a	SW6860	66412	1	11/6/2014 11:47:46 AM	11/5/2014 10:17:32 AM	A
1410256-05A	MA01MW003	SW6860	66412	1	11/6/2014 12:03:50 PM	11/5/2014 10:17:32 AM	A
1410256-06A	M114MW002	SW6860	66412	1	11/6/2014 12:19:54 PM	11/5/2014 10:17:32 AM	A
1410256-07A	M114MW003	SW6860	66412	1	11/6/2014 12:35:59 PM	11/5/2014 10:17:32 AM	A
1410256-08A	M114MW004	SW6860	66412	1	11/6/2014 12:52:03 PM	11/5/2014 10:17:32 AM	A
1410256-09A	M114MW001	SW6860	66412	1	11/6/2014 1:08:07 PM	11/5/2014 10:17:32 AM	A
1410256-10A	MWQ-24	SW6860	66412	1	11/6/2014 1:24:12 PM	11/5/2014 10:17:32 AM	A
1410256-10AMS	MWQ-24MS	SW6860	66412	1	11/6/2014 1:40:16 PM	11/5/2014 10:17:32 AM	A
1410256-10AMSD	MWQ-24MSD	SW6860	66412	1	11/6/2014 1:56:20 PM	11/5/2014 10:17:32 AM	A
CCV1-141106	-----	SW6860	R76214	1	11/6/2014 2:12:25 PM		A
LCVL2-141106	-----	SW6860	R76214	1	11/6/2014 2:28:29 PM		A
LRB2-141106	-----	SW6860	R76214	1	11/6/2014 2:44:33 PM		A
1410256-11A	MA02MW001D	SW6860	66412	1	11/6/2014 3:00:38 PM	11/5/2014 10:17:32 AM	A
LRB1-141107	-----	SW6860	R76214	1	11/7/2014 9:09:44 AM		A
ICV-141107	-----	SW6860	R76214	1	11/7/2014 9:25:48 AM		A
LCVL1-141107	-----	SW6860	R76214	1	11/7/2014 9:41:52 AM		A
ICS-141107	-----	SW6860	R76214	1	11/7/2014 9:57:57 AM		A
SBLK-141107	-----	SW6860	66412	1	11/7/2014 10:14:01 AM		A
1410256-11A	MA02MW001D	SW6860	66412	5	11/7/2014 10:30:05 AM	11/5/2014 10:17:32 AM	A
CCV1-141107	-----	SW6860	R76214	1	11/7/2014 10:46:09 AM		A
LCVL2-141107	-----	SW6860	R76214	1	11/7/2014 11:02:14 AM		A
LRB2-141107	-----	SW6860	R76214	1	11/7/2014 11:18:18 AM		A

APPENDIX D

Chemical Analytical Program
(Data Validation Reports)
(On attached CD)

This page intentionally left blank

GCAL
ANALYTICAL LABORATORIES, LLC

NELAP CERTIFICATE NUMBER 01955
DOD ELAP CERTIFICATE NUMBER L13-190

ANALYTICAL RESULTS

PERFORMED BY

GCAL, LLC
7979 Innovation Park Dr.
Baton Rouge, LA 70820

Report Date 05/08/2014

GCAL Report 214050215

Deliver To	Trinity A&D 1002 N Eglin Pkwy Shalimar, FL 32579 850-613-6800
Attn	Jonathan Kramer

Customer TRINITY Analysis & Development Corp.

Project Melrose

CASE NARRATIVE

Client: TRINITY Analysis & Development Corp. **Report:** 214050215

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the sample cross-reference page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

SEMI-VOLATILES GAS CHROMATOGRAPHY

In the TX 1005 analysis, the recovery for the surrogate, o-Terphenyl is above the upper control limit for 21405021501 (IDW-01). No target compounds were detected in the sample; therefore the data is reportable.

Sample Test Summary Report: 214050215

Lab Sample ID	Cust. Sample ID	Matrix	Proc. Desc.
21405021501	IDW-01	W	SW-846 1010 Flashpoint Water
21405021501	IDW-01	W	SM 4500 H+B/SW-846 9040 pH
21405021501	IDW-01	W	Total Hydrocarbons TX1005 Water Prep
21405021501	IDW-01	W	Total Hydrocarbons TX1005 Water

Manual Integrations: 214050215

Lab Sample ID	Cust. Sample ID	Prod. Desc.	Compound	Comp. Name	
214050215 01	IDW-01	TNRCC 1005, Rev. 3	84-15-1	o-Terphenyl	

Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

Common Abbreviations Utilized in this Report

ND	Indicates the result was Not Detected at the specified RDL
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
RDL	Reporting Detection Limit
00:00	Reported as a time equivalent to 12:00 AM

Reporting Flags Utilized in this Report

J	Indicates the result is between the MDL and RDL
U	Indicates the compound was analyzed for but not detected
B	Indicates the analyte was detected in the associated Method Blank

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with NELAC, this report shall be reproduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with the NELAC standard and terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Estimated uncertainty of measurement is available upon request. This report is in compliance with the DOD QSM as specified in the contract if applicable.

Authorized Signature
GCAL REPORT 214050215

THIS REPORT CONTAINS 28 PAGES.

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21405021501	IDW-01	Water	05/01/2014 11:40	05/02/2014 10:00

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 32.8 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: DB-5MS-30M ID: .25 (mm)

Concentrated Extract Volume: 3000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 531862 Analytical Batch: 531992

Sample ID: IDW-01

Contract:

SAS No.: SDG No.: 214050215

Lab Sample ID: 21405021501

Date Collected: 05/01/14 Time: 1140

Date Received: 05/02/14

Date Extracted: 05/07/14

Date Analyzed: 05/07/14 Time: 1458

Dilution Factor: 1 Analyst: SMH

Prep Method: TX1005 PREP

Analytical Method: TX1005

Sulfur Cleanup: (Y/N) N Instrument ID: GCS20A

Lab File ID: 2140507/sv20a007

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
GCSV-05-0	>C12-C28	120	U	120	2290
GCSV-05-0	>C28-C35	120	U	120	2290
GCSV-05-0	C6-C12	103	U	103	1370
GCSV-05-0	TOTAL TPH (C6-C35)	103	U	103	2290

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.:

Matrix: Water

Sample wt/vol: 31.2 Units: mL

Level: (low/med) LOW

% Moisture: decanted: (Y/N)

GC Column: DB-5MS-30M ID: .25 (mm)

Concentrated Extract Volume: 3000 (µL)

Soil Aliquot Volume: (µL)

Injection Volume: 1 (µL)

GPC Cleanup: (Y/N) N pH:

Prep Batch: 531862 Analytical Batch: 531992

Sample ID: MB1313227

Contract:

SAS No.: SDG No.: 214050215

Lab Sample ID: 1313227

Date Collected: Time:

Date Received:

Date Extracted: 05/07/14

Date Analyzed: 05/07/14 Time: 1329

Dilution Factor: 1 Analyst: SMH

Prep Method: TX1005 PREP

Analytical Method: TX1005

Sulfur Cleanup: (Y/N) N Instrument ID: GCS20A

Lab File ID: 2140507/sv20a004

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
GCSV-05-0	C6-C12	108	U	108	1440
GCSV-05-0	>C12-C28	126	U	126	2400
GCSV-05-0	>C28-C35	126	U	126	2400
GCSV-05-0	TOTAL TPH (C6-C35)	108	U	108	2400

2E

WATER ORGANIC SURROGATE RECOVERY

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214050215

GC Column (1): DB-5MS-30M ID: .25 (mm) GC Cloumn (2): ID: (mm)

Method: TX1005

	EPA SAMPLE NO.	SMC1 1-(1)	Lo	Hi	F	SMC2 2	Lo	Hi	F	SMC3 3	Lo	Hi	F	SMC4 4	Lo	Hi	F	TOT OUT
1.	IDW-01	153	58	148	*													1
2.	MB1313227	135	58	148														0
3.	LCS1313228	138	58	148														0
4.	LCSD1313229	142	58	148														0

SMC 1 : O-Terphenyl SMC 2 :

SMC 3 : SMC 4 :

Column to be used to flag recovery limits

* Value outside of contract required limits

D Surrogate diluted out

214050215 9

3E

WATER ORGANICS LCS/LCSD RECOVERY

Lab Name: GCAL

Lab Code: LA024 Case No.: SAS No.: SDG No.: 214050215

Contract: Method: TX1005

Prep Batch: 531862 Analytical Batch: 531992

SAMPLE NO : 1313228

COMPOUND	UNITS	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS % REC	LCS % REC FLAG	QC. LIMITS
TOTAL TPH (C6-C35)	ug/L	63100	0	79000	125		75 - 125

SAMPLE NO : 1313229

COMPOUND	UNITS	SPIKE ADDED	LCSD CONC.	LCSD % REC	REC FLAG	% RPD	RPD FLAG	QC. LIMITS REC	QC. LIMITS RPD
TOTAL TPH (C6-C35)	ug/L	63300	76700	121		3		75 - 125	0 - 20

RPD : 0 out of 1 outside limits

Spike Recovery: 0 out of 2 outside limits

4C

ORGANIC METHOD BLANK SUMMARY

Lab Name: GCAL

Lab Code: LA024 Case No.:

Lab Sample ID: 1313227

Matrix: Water Sulfur Cleanup: (Y/N) N

Date Analyzed (1): 05/07/14 Time (1): 1329

Instrument ID (1): GCS20A

GC Column (1): DB-5MS-30M ID: .25 (mm)

Method: TX1005

Lab File ID: 2140507/sv20a0

Sample ID: MB1313227

Contract:

SAS No.: SDG No.: 214050215

Date Extracted: 05/07/14

Date Analyzed (2): Time (2):

Instrument ID (2):

GC Column (2): ID: (mm)

Prep Batch: 531862 Analytical Batch: 531992

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES

	SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	INSTRUMENT ID
1.	LCS1313228	1313228	05/07/14	1358	GCS20A
2.	LCSD1313229	1313229	05/07/14	1428	GCS20A
3.	IDW-01	21405021501	05/07/14	1458	GCS20A

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-OCT-2013 10:47
End Cal Date : 30-OCT-2013 13:14
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /var/chem/gcsv20a.i/2140507.b/TX1005.m
Cal Date : 08-May-2014 09:33 smh
Curve Type : Average

Calibration File Names:
Level 1: /var/chem/gcsv20a.i/2131030p.b/sv20a004d.d
Level 2: /var/chem/gcsv20a.i/2131030p.b/sv20a005d.d
Level 3: /var/chem/gcsv20a.i/2131030p.b/sv20a006d.d
Level 4: /var/chem/gcsv20a.i/2131030p.b/sv20a007d.d
Level 5: /var/chem/gcsv20a.i/2131030p.b/sv20a008d.d
Level 6: /var/chem/gcsv20a.i/2131030p.b/sv20a009d.d

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	200.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
1 >C6-C12	21189	25141	24496	23565	21601	20088	22680	8.872
121 >C6-C10	21189	25141	24496	23565	21601	20088	22680	8.872
122 >C10-C28	17925	23903	19649	16510	17526	18248	18960	13.862
2 >C6-C8	21189	25141	24496	23565	21601	20088	22680	8.872
3 >C8-C10	21189	25141	24496	23565	21601	20088	22680	8.872
4 >C10-C12	21189	25141	24496	23565	21601	20088	22680	8.872
5 >C12-C16	17925	23903	19649	16510	17526	18248	18960	13.862
6 >C16-C35	17925	23903	19649	16510	17526	18248	18960	13.862
7 >C16-C21	17925	23903	19649	16510	17526	18248	18960	13.862
8 >C21-C35	17925	23903	19649	16510	17526	18248	18960	13.862
9 C-6	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
11 C-8	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 C-10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
15 C-12	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
17 C-14	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
19 C-16	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
21 C-18	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
23 C-20	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
24 C-21	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
25 C-22	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
26 C-23	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-OCT-2013 10:47
End Cal Date : 30-OCT-2013 13:14
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /var/chem/gcsv20a.i/2140507.b/TX1005.m
Cal Date : 08-May-2014 09:33 smh
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	200.000 Level 4	500.000 Level 5	1000.000 Level 6	___ RRF	% RSD
27 C-24	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
28 C-25	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
29 C-26	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
30 C-27	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
31 C-28	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
32 C-35	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
33 >C12-C28	17925	23903	19649	16510	17526	18248	18960	13.862
35 >C28-C35	17925	23903	19649	16510	17526	18248	18960	13.862
120 >C6-C35	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
123 C7-C8	21189	25141	24496	23565	21601	20088	22680	8.872
$ 34 O-TERPHENYL	37078	27784	29437	27688	27385	26404	29296	13.436

Data File: /var/chem/gcsv20a.i/2131030p.b/sv20a010.d
Report Date: 30-Oct-2013 14:16

GCAL, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: 1600
Level: LOW
Data Type: GC MULTI COMP
SpikeList File: c6-12icv.spk
Sublist File: c6-c12.sub
Method File: /var/chem/gcsv20a.i/2131030p.b/TX1005.m
Misc Info:

Client SDG: 2131030p
Fraction: SV

Operator: dlb
SampleType: LCS
Quant Type: ESTD

SPIKE COMPOUND	CONC ADDED UG/L	CONC RECOVERED UG/L	% RECOVERED	LIMITS
1 >C6-C12	100	111	111.42	85-115

SURROGATE COMPOUND	CONC ADDED UG/L	CONC RECOVERED UG/L	% RECOVERED	LIMITS
$ 34 O-TERPHENYL	500000	0.00	*	60-140

Data File: /var/chem/gcsv20a.i/2131030p.b/sv20a010d.d
Report Date: 29-Apr-2014 15:47

GCAL, Inc.

RECOVERY REPORT

Client Name:
Client SDG: 2131030p
Sample Matrix: LIQUID
Fraction: SV
Lab Smp Id: 1600
Level: LOW
Operator: dlb
Data Type: GC MULTI COMP
SampleType: LCS
SpikeList File: c12-28icv.spk
Quant Type: ESTD
Sublist File: c12-c35.sub
Method File: /var/chem/gcsv20a.i/2131030p.b/TX1005.m
Misc Info:

SPIKE COMPOUND	CONC ADDED UG/L	CONC RECOVERED UG/L	% RECOVERED	LIMITS
33 >C12-C28	100	113	113.34	85-115

GCAL, Inc.

1005 CALCULATION

Data file : /var/chem/gcsv20a.i/2140507.b/sv20a003d.d
Lab Smp Id: 1400
Inj Date : 07-MAY-2014 09:08
Operator : smh Inst ID: gcsv20a.i
Smp Info : 1400*1 93-8-10
Misc Info :
Comment :
Method : /var/chem/gcsv20a.i/2140507.b/TX1005.m
Meth Date : 07-May-2014 11:02 smh Quant Type: ESTD
Cal Date : 30-OCT-2013 13:14 Cal File: sv20a009d.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: c12-c35.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	35.00000	Volume of sample extracted (mL)
Vt	3000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Uf	1.00000	Correction factor

$$1005\ (C12\text{-}C28) = \frac{((\text{Sum of Area}) - (\text{Surr Area})) \times (\text{Final Vol}) \times (\text{Dilution Factor})}{(\text{Response Factor}) \times (\text{Initial Volume})}$$

$$= \frac{(5333552.0 - 3566078) \times 3000.0 \times 1.0}{18960 \times 35.0}$$

$$= 7990.4 \quad ug/L$$

Compounds	RF	%Diff
C6-C12	24921.51	9.9
C12-C28	17674.74	-6.8
C28-C35	17674.74	-6.8
O-TERPHENYL	35660.78	21.7

GCAL, Inc.

1005 CALCULATION

Data file : /var/chem/gcsv20a.i/2140507.b/sv20a010d.d
Lab Smp Id: 1400
Inj Date : 07-MAY-2014 16:31
Operator : smh Inst ID: gcsv20a.i
Smp Info : 1400*1 93-8-10
Misc Info :
Comment :
Method : /var/chem/gcsv20a.i/2140507.b/TX1005.m
Meth Date : 08-May-2014 09:13 smh Quant Type: ESTD
Cal Date : 30-OCT-2013 13:14 Cal File: sv20a009d.d
Als bottle: 10 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: c12-c35.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	35.00000	Volume of sample extracted (mL)
Vt	3000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Uf	1.00000	Correction factor

$$\text{1005 (C12-C28)} = \frac{((\text{Sum of Area}) - (\text{Surr Area})) \times (\text{Final Vol}) \times (\text{Dilution Factor})}{(\text{Response Factor}) \times (\text{Initial Volume})}$$

$$= \frac{(5186374.0 - 3470063) \times 3000.0 \times 1.0}{18960 \times 35.0}$$

$$= 7759.1 \text{ ug/L}$$

Compounds	RF	%Diff
C6-C12	27088.66	19.4
C12-C28	17163.11	-9.5
C28-C35	17163.11	-9.5
O-TERPHENYL	34700.63	18.4

1005 SAMPLE PREPARATION FORM

EXTRACTION DATE/TIME: 5/7/14 Start: 11:45 End: 13:14		**BATCH NO:**	531862
MATRIX:	WATER ☑ SOIL ☐ OTHER ☐	**LEVEL:**	LOW ☑ MEDIUM ☐

	CLIENT	CLIENT ID	GCAL ID	INITIAL VOL/WT mL g	FINAL VOLUME (mL)	Init pH	SAMPLE TYPE	COMMENTS	METHOD
1	QC ACCOUNT	MB for HBN 531862 [EXTO/39107]	1313227	31.2	3.0		MB		SHAKER ✓
2	QC ACCOUNT	LCS for HBN 531862 [EXTO/39107	1313228	31.7	3.0		LCS		
3	QC ACCOUNT	LCSD for HBN 531862 [EXTO/3910	1313229	31.6	3.0		LCSD		SEPARATORY FUNNEL/3510
4	4747	IDW-01	21405021501	32.8	3.0		SAMPLE		
5	0080	RR-TX1005-USTW1	21405022803	31	3.0		SAMPLE		SOXHLET/3540
6	0080	RR-TX1005-USTW2	21405022804	32.1	3.0		SAMPLE		
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									Sodium Sulfate:
24									
25									Methanol:
26									
27									Pentane Lot No 134016
28									

OMMENTS: SAMPLE PREPARATION INCLUDE DETERMINATION OF SAMPLE VOLUME/WEIGHT, SOLVENT EXTRACTION AND EVAPORATION OF OLVENT TO FINAL VOLUME

BALANCE ID: MB3557 TEMP: NA

SURROGATE ID	583-13-1	DIESEL SPIKE ID		GAS SPIKE ID	583-13-1	**TECHNICIAN**	**DATE**
VOLUME	100ul	VOLUME		VOLUME	100ul		5/7/14
CONCENTRATION	5000ug/ml	CONCENTRATION	NA	CONCENTRATION	10,000ug/ml		
						SUPERVISOR	**DATE**
SPIKE WITNESS	NA					TES	5/8/14

LABORATORY CHRONICLE: GCSV DEPARTMENT

Date: 10/31/2013
Instrument: gcsv20a.i
Method File: /var/chem/gcsv20a.i/2131030p.b/TX1005.m
Batch: /var/chem/gcsv20a.i/2131030p.b
Column-Detector: DB-5MS-30M

Sample ID	Standard ID	DataFile	Wgt/Vol	Injection Time	Dil	Anal	ALS	Comments
cm		sv20a001.d	35.00 ml	30-OCT-2013 09:48	1.000	dlb	1	lacm
pent lot #1235		sv20a002.d	35.00 ml	30-OCT-2013 10:18	1.000	dlb	2	c6-c12
1201		sv20a004.d	35.00 ml	30-OCT-2013 10:47	1.000	dlb	53	c6-c12
1201		sv20a004d.d	35.00 ml	30-OCT-2013 10:47	1.000	dlb	53	c12-c35
1202		sv20a005.d	35.00 ml	30-OCT-2013 11:17	1.000	dlb	54	c6-c12
1202		sv20a005d.d	35.00 ml	30-OCT-2013 11:17	1.000	dlb	54	c12-c35
1203		sv20a006.d	35.00 ml	30-OCT-2013 11:46	1.000	dlb	55	c6-c12
1203		sv20a006d.d	35.00 ml	30-OCT-2013 11:46	1.000	dlb	55	c12-c35
1204		sv20a007.d	35.00 ml	30-OCT-2013 12:15	1.000	dlb	56	c6-c12
1204		sv20a007d.d	35.00 ml	30-OCT-2013 12:15	1.000	dlb	56	c12-c35
1205		sv20a008.d	35.00 ml	30-OCT-2013 12:45	1.000	dlb	57	c6-c12
1205		sv20a008d.d	35.00 ml	30-OCT-2013 12:45	1.000	dlb	57	c12-c35
1206		sv20a009.d	35.00 ml	30-OCT-2013 13:14	1.000	dlb	58	c6-c12
1206		sv20a009d.d	35.00 ml	30-OCT-2013 13:14	1.000	dlb	58	c12-c35
1600		sv20a010.d	1.00 ml	30-OCT-2013 14:41	1.000	dlb	59	c6-c12
1600		sv20a010d.d	1.00 ml	30-OCT-2013 14:41	1.000	dlb	59	c12-c35
1249239		sv20a011.d	10.00 g	30-OCT-2013 15:11	1.000	dlb	11	c6-c12
1249239		sv20a012.d	10.00 g	30-OCT-2013 15:40	1.000	dlb	12	c6-c12
1249240		sv20a013.d	10.00 g	30-OCT-2013 16:09	1.000	dlb	13	c6-c12
1249240		sv20a013d.d	10.00 g	30-OCT-2013 16:09	1.000	dlb	13	c12-c35
1249240		sv20a014.d	10.00 g	30-OCT-2013 16:38	1.000	dlb	14	c6-c12
1249240		sv20a014d.d	10.00 g	30-OCT-2013 16:38	1.000	dlb	14	c12-c35
1249241		sv20a015.d	10.00 g	30-OCT-2013 17:07	1.000	dlb	15	c6-c12
1249241		sv20a015d.d	10.00 g	30-OCT-2013 17:07	1.000	dlb	15	c12-c35
1249241		sv20a016.d	10.00 g	30-OCT-2013 17:36	1.000	dlb	16	c6-c12
1249241		sv20a016d.d	10.00 g	30-OCT-2013 17:36	1.000	dlb	16	c12-c35
21310261701		sv20a017.d	10.20 g	30-OCT-2013 18:05	1.000	dlb	17	c6-c12
21310261701		sv20a017d.d	10.20 g	30-OCT-2013 18:05	1.000	dlb	17	tx1006arom
21310261701		sv20a018.d	10.20 g	30-OCT-2013 18:33	1.000	dlb	18	c6-c12
21310261701		sv20a018d.d	10.20 g	30-OCT-2013 18:33	1.000	dlb	18	tx1006alip
1249242		sv20a019.d	10.00 g	30-OCT-2013 19:02	1.000	dlb	19	c6-c12
1249242		sv20a019d.d	10.00 g	30-OCT-2013 19:02	1.000	dlb	19	tx1006arom
1249242		sv20a020.d	10.00 g	30-OCT-2013 19:30	1.000	dlb	20	tx1006alip
1249243		sv20a021.d	10.00 g	30-OCT-2013 19:59	1.000	dlb	21	c6-c12
1249243		sv20a021d.d	10.00 g	30-OCT-2013 19:59	1.000	dlb	21	tx1006arom
1249243		sv20a022.d	10.00 g	30-OCT-2013 20:28	1.000	dlb	22	tx1006alip

LABORATORY CHRONICLE: GCSV DEPARTMENT

Date: 10/31/2013
Instrument: gcsv20a.i
Method File: /var/chem/gcsv20a.i/2131030p.b/TX1005.m
Batch: /var/chem/gcsv20a.i/2131030p.b
Column-Detector: DB-5MS-30M

Sample ID	Standard ID	DataFile	Wgt/Vol	Injection Time	Dil	Anal	ALS	Comments
1400		sv20a023.d	35.00 ml	30-OCT-2013 20:57	1.000	dlb	23	c6-c12
1400		sv20a023d.d	35.00 ml	30-OCT-2013 20:57	1.000	dlb	23	c12-c35
1400		sv20a024.d	35.00 ml	30-OCT-2013 21:26	1.000	dlb	23	c6-c12
1247446		sv20a025.d	33.00 ml	30-OCT-2013 21:54	1.000	dlb	25	c6-c12
1247446		sv20a026.d	33.00 ml	30-OCT-2013 22:23	1.000	dlb	26	c6-c12
1247447		sv20a027.d	33.10 ml	30-OCT-2013 22:52	1.000	dlb	27	c6-c12
1247447		sv20a027d.d	33.10 ml	30-OCT-2013 22:52	1.000	dlb	27	c12-c35
1247447		sv20a028.d	33.10 ml	30-OCT-2013 23:21	1.000	dlb	28	c6-c12
1247447		sv20a028d.d	33.10 ml	30-OCT-2013 23:21	1.000	dlb	28	c12-c35
1247448		sv20a029.d	32.70 ml	30-OCT-2013 23:49	1.000	dlb	29	c6-c12
1247448		sv20a029d.d	32.70 ml	30-OCT-2013 23:49	1.000	dlb	29	c12-c35
1247448		sv20a030.d	32.70 ml	31-OCT-2013 00:18	1.000	dlb	30	c6-c12
1247448		sv20a030d.d	32.70 ml	31-OCT-2013 00:18	1.000	dlb	30	c12-c35
21310244001		sv20a031.d	31.20 ml	31-OCT-2013 00:47	1.000	dlb	31	c6-c12
21310244001		sv20a032.d	31.20 ml	31-OCT-2013 01:16	1.000	dlb	32	c6-c12
21310244002		sv20a033.d	31.00 ml	31-OCT-2013 01:44	1.000	dlb	33	c6-c12
21310244002		sv20a033d.d	31.00 ml	31-OCT-2013 01:44	1.000	dlb	33	c12-c35
21310244002		sv20a034.d	31.00 ml	31-OCT-2013 02:13	1.000	dlb	34	c6-c12
21310244002		sv20a034d.d	31.00 ml	31-OCT-2013 02:13	1.000	dlb	34	c12-c35
1400		sv20a035.d	35.00 ml	31-OCT-2013 02:42	1.000	dlb	35	c6-c12
1400		sv20a035d.d	35.00 ml	31-OCT-2013 02:42	1.000	dlb	35	c12-c35
1400		sv20a036.d	35.00 ml	31-OCT-2013 03:11	1.000	dlb	35	c6-c12
21310244003		sv20a037.d	31.40 ml	31-OCT-2013 03:40	1.000	dlb	37	c6-c12
21310244003		sv20a037d.d	31.40 ml	31-OCT-2013 03:40	1.000	dlb	37	c12-c35
21310244003		sv20a038.d	31.40 ml	31-OCT-2013 04:09	1.000	dlb	38	c6-c12
21310244003		sv20a038d.d	31.40 ml	31-OCT-2013 04:09	1.000	dlb	38	c12-c35
21310244004		sv20a039.d	30.60 ml	31-OCT-2013 04:38	1.000	dlb	39	c6-c12
21310244004		sv20a040.d	30.60 ml	31-OCT-2013 05:06	1.000	dlb	40	c6-c12
21310244005		sv20a041.d	31.60 ml	31-OCT-2013 05:35	1.000	dlb	41	c6-c12
21310244005		sv20a042.d	31.60 ml	31-OCT-2013 06:04	1.000	dlb	42	c6-c12
21310244006		sv20a043.d	32.00 ml	31-OCT-2013 06:33	1.000	dlb	43	c6-c12
21310244006		sv20a044.d	32.00 ml	31-OCT-2013 07:02	1.000	dlb	44	c6-c12
21310244007		sv20a045.d	31.50 ml	31-OCT-2013 07:31	1.000	dlb	45	c6-c12
21310244007		sv20a046.d	31.50 ml	31-OCT-2013 08:00	1.000	dlb	46	c6-c12
1400		sv20a047.d	35.00 ml	31-OCT-2013 08:29	1.000	dlb	47	c6-c12
1400		sv20a047d.d	35.00 ml	31-OCT-2013 08:29	1.000	dlb	47	c12-c35

LABORATORY CHRONICLE: GCSV DEPARTMENT

Date: 10/31/2013
Instrument: gcsv20a.i
Method File: /var/chem/gcsv20a.i/2131030p.b/TX1005.m
Batch: /var/chem/gcsv20a.i/2131030p.b
Column-Detector: DB-5MS-30M

Sample ID	Standard ID	DataFile	Wgt/Vol	Injection Time	Dil	Anal	ALS	Comments
1400		sv20a048.d	35.00 ml	31-OCT-2013 08:58	1.000	dlb	47	c6-c12
21310244008		sv20a061.d	32.30 ml	31-OCT-2013 09:27	1.000	dlb	61	c6-c12
21310244008		sv20a062.d	32.30 ml	31-OCT-2013 09:56	1.000	dlb	62	c6-c12
21310244009		sv20a063.d	32.10 ml	31-OCT-2013 10:25	1.000	dlb	63	c6-c12
21310244009		sv20a064.d	32.10 ml	31-OCT-2013 10:54	1.000	dlb	64	c6-c12
21310244010		sv20a065.d	31.60 ml	31-OCT-2013 11:24	1.000	dlb	65	c6-c12
21310244010		sv20a066.d	31.60 ml	31-OCT-2013 11:53	1.000	dlb	66	c6-c12
21310244014		sv20a067.d	31.80 ml	31-OCT-2013 12:22	1.000	dlb	67	c6-c12
21310244014		sv20a068.d	31.80 ml	31-OCT-2013 12:51	1.000	dlb	68	c6-c12
1400		sv20a069.d	35.00 ml	31-OCT-2013 13:20	1.000	dlb	69	c6-c12
1400		sv20a069d.d	35.00 ml	31-OCT-2013 13:20	1.000	dlb	69	c12-c35

LABORATORY CHRONICLE: GCSV DEPARTMENT

Date: 05/08/2014
Instrument: gcsv20a.i
Method File: /var/chem/gcsv20a.i/2140507.b/TX1005.m
Batch: /var/chem/gcsv20a.i/2140507.b
Column-Detector: DB-5MS-30M

Sample ID	Standard ID	DataFile	Wgt/Vol	Injection Time	Dil	Anal	ALS	Comments
cm		sv20a001.d	35.00 ml	07-MAY-2014 08:12	1.000	smh	1	lacm
pent lot #1235		sv20a002.d	35.00 ml	07-MAY-2014 08:40	1.000	smh	2	c6-c12
1400		sv20a003.d	35.00 ml	07-MAY-2014 09:08	1.000	smh	3	c6-c12
1400		sv20a003d.d	35.00 ml	07-MAY-2014 09:08	1.000	smh	3	c12-c35
1313227		sv20a004.d	31.20 ml	07-MAY-2014 13:29	1.000	smh	4	c6-c12
1313228		sv20a005.d	31.70 ml	07-MAY-2014 13:58	1.000	smh	5	c6-c12
1313228		sv20a005d.d	31.70 ml	07-MAY-2014 13:58	1.000	smh	5	c12-c35
1313229		sv20a006.d	31.60 ml	07-MAY-2014 14:28	1.000	smh	6	c6-c12
1313229		sv20a006d.d	31.60 ml	07-MAY-2014 14:28	1.000	smh	6	c12-c35
21405021501		sv20a007.d	32.80 ml	07-MAY-2014 14:58	1.000	smh	7	c6-c12
21405021501		sv20a007d.d	32.80 ml	07-MAY-2014 14:58	1.000	smh	7	c12-c35
21405022803		sv20a008.d	31.00 ml	07-MAY-2014 15:29	1.000	smh	8	c6-c12
21405022803		sv20a008d.d	31.00 ml	07-MAY-2014 15:29	1.000	smh	8	c12-c35
21405022804		sv20a009.d	32.10 ml	07-MAY-2014 15:59	1.000	smh	9	c6-c12
21405022804		sv20a009d.d	32.10 ml	07-MAY-2014 15:59	1.000	smh	9	c12-c35
1400		sv20a010.d	35.00 ml	07-MAY-2014 16:31	1.000	smh	10	c6-c12
1400		sv20a010d.d	35.00 ml	07-MAY-2014 16:31	1.000	smh	10	c12-c35

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21405021501	IDW-01	Water	05/01/2014 11:40	05/02/2014 10:00

EPA 1010A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/06/2014 08:00	MDW	531754

CAS#	Parameter	Result	RDL	MDL	Units
000000-01-3	FlashPoint	> 170	50	50	Deg F

214050215 23

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21405021501	IDW-01	Water	05/01/2014 11:40	05/02/2014 10:00

SM 4500-H+ B-2011/EPA 9040C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/02/2014 16:10	DNM	531621

CAS#	Parameter	Result	RDL	MDL	Units
pH	pH	9.15	1.00	1.00	pH unit

General Chemistry Quality Control Summary

Analytical Batch 531754	**Client ID**	LCS531754			
Prep Batch N/A	**GCAL ID**	1312748			
	Sample Type	LCS			
	Analytical Date	05/06/2014 08:00			
	Matrix	Water			
EPA 1010A		**Spike Added**	**Result**	**% R**	**Control Limits % R**
000000-01-3 FlashPoint		90	91	101	97.8 -102.2

Analytical Batch 531754	**Client ID**	PT-FP-SOIL		1311958DUP		
Prep Batch N/A	**GCAL ID**	21405022405		1312749		
	Sample Type	SAMPLE		DUP		
	Analytical Date	05/06/2014 08:00		05/06/2014 08:00		
	Matrix	Water		Water		
EPA 1010A		**Units**	Deg F	**Result**	**RPD**	**RPD Limit**
		Result	**RDL**			
000000-01-3 FlashPoint		146	50	149	2	25

214050215 25

General Chemistry Quality Control Summary

Analytical Batch 531621 Prep Batch N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	IDW-01 21405021501 SAMPLE 05/02/2014 16:10 Water		1311876DUP 1312243 DUP 05/02/2014 16:10 Water		
SM 4500-H+ B-2011/EPA 9040C		**Units** **Result**	pH unit **RDL**	**Result**	**RPD**	**RPD Limit**
pH	pH	9.15	1.00	9.14	0	6

SZ 5125504T2

TRINITY ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Client ID: 4747 - TRINITY Analysis & Development Corp.

SDG: 214050215

Due Date: 05/09/14

Project Name / Site Name: Melrose 2014 Annual	
Facility: Melrose Air Force Range	
Client Name: USACE ABQ	
Project Manager: Jonathan Kramer	
Collected by: Benjamin Stewart (251)709-6509	

Turn Around Time

24 Hour	☐
7 Day	☐
Standard	X
Other	☐

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	Sample Code (2)	Sample Number (3)	Sample Matrix (4)	Sample Method (5)	Number of Containers	pH	Flashpoint	TX-1005					Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID (Alphabetical Notation)
									Quality Assurance Samples (7)											
IDW-01		01052014	1140		N	1	WG		4	X	X	X								A
				-																
				-																
				-																
				-																
				-																
				-																
				-																
				-																
				-																
				-																
				-																
				-																
				-																
				-																
				-																
				-																
				-																
				-																
				-																
				-																
				-																

2.6, 4.6 EZZ

Custody Transfers Prior to Receipt by Laboratory

	Relinquished by (Signed)	Date	Time	Received by (Signed)	Date	Time
1.		5-1-14	1400	FEDEX		
2.	FEDEX	5-2-14	10:00	Josh	5-2-14	10:00
3.						

Delivered Directly to Lab:	No	Shipped: No.:	1
Method of Shipment:	Fedex	Airbill Number:	8055 3204 0084
Analytical Lab:	GCAL	Delivery Location:	Baton Rouge, LA
Lab Recipient:		Delivery Date/Time:	

1.) Chain of Custody Number = site name (e.g., SS-125) and then date (yymmdd) collected + custody number (e.g. SS1251207201)...July 20, 2012. (12 Characters Max; No Dashes)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-01 on 07/20/12 = 1, if sampled again on 07/20/12 = 2, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Ground Water, WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS= Suface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ= Soil Blanks

5.) Sample Method Codes: CS = Composite Sample, E2 = Elec. Submersible Pump (1982 +), G = Grab, H = Hollow Stem Auger, PP = Peristaltic Pump, W = Swab or Wipe. (See handout for more methods)

6.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

NOTES: Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c. ERPIMS LOCID for TB, EB and AB are designated as FB-LDQC samples.

214050215

GCAL ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIVING CHECKLIST

214050215

SAMPLE DELIVERY GROUP 214050215	
Client 4747 - TRINITY Analysis & Development Corp.	**Transport Method** FEDEX
Profile Number 195817	**Received By** Gary, Joshua J
Line Item(s) 1 - Waters	**Receive Date(s)** 05/02/14

CHECKLIST	YES	NO	NA
Were all samples received using proper thermal preservation?	☑	☐	☐
When used, were all custody seals intact?	☑	☐	☐
Were all samples received in proper containers?	☑	☐	☐
Were all samples received using proper chemical preservation?	☑	☐	☐
Was preservative added to any container at the lab?	☐	☑	☐
Were all containers received in good condition?	☑	☐	☐
Were all VOA vials received with no head space?	☑	☐	☐
Do all sample labels match the Chain of Custody?	☑	☐	☐
Did the Chain of Custody list the sampling technician?	☑	☐	☐
Was the COC maintained i.e. all signatures, dates and time of receipt included?	☑	☐	☐

COOLERS

Airbill	Thermometer ID: E22	Temp(°C)
8055 3204 0084		2.6
		4.6

DISCREPANCIES

None

LAB PRESERVATIONS

None

NOTES

SZ 5172502172 214050215

Data Validation Report

Melrose 2014 Annual

Trinity Analysis & Development Corp

SDG: 214042416 Date: October 9, 2014

eDATApro

Environmental Data Professional, LLC
1432 Watkins Street • Lake Charles, LA 70601 • phone: 337-540-0036 • fax: 337-478-6061

Disclaimer:

The validation performed and reported herein is based on specifications and procedures presented to eDATApro with the associated data package. Any qualifications or review not specified with package requirements was based on USEPA National Functional Guidelines for Inorganic and Organic Data Review.

Information contained in this report is based solely on the hardcopy and/or electronic deliverables that were submitted to eDATApro. eDATApro reserves the rights to modify or change the validation report if new information is presented or if this report is determined to be inaccurate or incomplete.

Cover Letter

Validation Report Date: October 9, 2014

Sample Delivery Group: 214042416

Project Name: Melrose 2014 Annual

Data validation personnel: Dana Hebert and Tony Duhon

Data Deliverables Included:

Validation Report:

__✓__ Introduction

__✓__ Sample Identification Cross- Reference Table

__✓__ Data Validation Components

__✓__ Data Validation Findings Summary

__✓__ Table 1-1, Summary of Qualified Data

__✓__ Table 1-2, Data Qualifier Reference Table

__✓__ Appendix I, Form I Data (qualified)

__✓__ Appendix II, Chain of Custody

Approval Signature: Anthony Duhon Date: October 9, 2014

INTRODUCTION:

SDG: 214042416
Project Name: Melrose 2014 Annual
Laboratory: Gulf Coast Analytical Laboratories/DHL Analytical/ALS Environmental
Matrix: Waters

Environmental Data Professional, LLC (eDATApro) received one electronic data package containing the results for ten field samples, one field duplicate, one matrix spike pair and six trip blanks. Level III Data Validation was performed according to guidance from *USEPA National Functional Guidelines for Organic Data Review, USEPA National Functional Guidelines for Inorganic Data Review* and the project specific Quality Assurance Project Plan.

The following samples were reviewed:

Sample ID	Lab ID	Collection Date/Time	Analyses
MA01MW002	21404241601	04/23/2014 10:06 AM	[1-11]
	1404319-01A		[12]
	R1402918-01		[13]
MA01MW002-ms	21404241602	04/23/2014 10:06 AM	[1-9]
MA01MW002-sd	21404241603	04/23/2014 10:06 AM	[1-9]
TB-1	21404241604	04/23/2014 10:06 AM	[1]
MA01MW003	21404241605	04/23/2014 01:08 PM	[1-11]
	1404319-02A		[12]
	R1402918-02		[13]
MA01MW001	21404241606	04/23/2014 02:16 PM	[1-11]
	1404319-03A		[12]
	R1402918-03		[13]
TB-2	21404241607	04/23/2014 02:16 PM	[1]
MA01MW004	21404241608	04/24/2014 10:10 AM	[1-11]
	1404319-04A		[12]
	R1402918-04		[13]
M114MW003	21404241609	04/24/2014 12:00 PM	[1-11]
	1404319-05A		[12]
	R1402918-05		[13]
TB-3	21404241610	04/24/2014 10:10 AM	[1]
M114MW002	21404241611	04/24/2014 01:08 PM	[1-11]
	1404319-06A		[12]
	R1402918-06		[13]
M114MW001	21404241612	04/24/2014 02:30 PM	[1-11]
	1404319-07A		[12]
	R1402918-07		[13]
TB-4	21404241613	04/24/2014 01:08 PM	[1]
M114MW004	21404241614	04/25/2014 09:25 AM	[1-11]
	1404319-08A		[12]
	R1402918-08		[13]

MWQ-24	21404241615	04/25/2014 11:00 AM	[1-11]
	1404319-09A		[12]
	R1402918-09		[13]
TB-6	21404241616	04/25/2014 09:25 AM	[1]
MA02MW001D	21404241617	04/25/2014 12:52 PM	[1-11]
	1404319-10A		[12]
	R1402918-10		[13]
MA02MW001D-a	21404241618	04/25/2014 12:52 PM	[1-11]
	1404319-11A		[12]
	R1402918-11		[13]
TB-7	21404241619	04/25/2014 12:52 PM	[1]

Analyses Performed Codes:

[1] Volatile Organics – SW-846 8260B
[2] Explosives – SW-846 8330A
[3] TAL Metals (Total) – SW-846 6020A
[4] TAL Metals (Dissolved) – SW-846 6020A
[5] Mercury (Total) – SW-846 7470A
[6] Mercury (Dissolved) – SW-846 7470A
[7] Chloride and Sulfate – EPA 300.0
[8] Nitrate and Nitrite – EPA 353.2
[9] Total Cyanide – SW-846 9012B
[10] Total Alkalinity – SM 2320B
[11] Total Dissolved Solids – SM 2540C
[12] Perchlorate – SW-846 6860 (DHL Analytical)
[13] Hexavalent Chromium, Dissolved – EPA 218.6 (ALS Environmental)

DATA VALIDATION COMPONENTS

The data presented in this validation report was reviewed using a systematic process for evaluating performance and compliance of a set of data when compared to a set of standards to ascertain its completeness, correctness, and consistency using the methods and/or project defined criteria. The following components, as applicable to each analytical method, were reviewed in conducting the data validation:

- Data Completeness and Deliverables
- Sample Receipt (Chain of Custody Record)
    - Sample ID
    - Collection Date/Time
    - Matrix
    - Analysis Requests
- Chemical/Temperature Preservation
- Holding Times
- Analytical/Method Performance
    - Instrument Performance Checks
    - Instrument Calibrations
        - Stability of Analyte Response (Average Response Factor)
        - Linearity of Analytical Response (Correlation Coefficient)
        - Initial Calibration (multi-point)
        - Calibration Verification
    - Method Quality Controls
        - Instrument/Method Blank
        - Laboratory Control Sample
        - Laboratory Duplicate/Replicate
        - Surrogates
        - Internal Standards
        - Interference Check Sample
        - ICP Serial Dilution
    - Preparation Batch Quality Control
        - Preparation Blank
        - Laboratory Control Sample
        - Matrix Spikes
- Field Quality Controls
    - Field Duplicate
    - Field/Equipment Rinsate/Trip Blanks

Unless specifically stated otherwise in the method summary sections of this report, all components evaluated and data presented by the laboratory met the applicable acceptance criteria and are considered fully usable.

DATA VALIDATION FINDINGS SUMMARY

I. General Package:

A final laboratory data package compliant for level III data validation was received on September 22, 2014. The database EDD was incomplete. A resubmission was received on October 1, 2014.

When necessary, dilution analyses were performed to minimize sample matrix interference and/or obtain analyte measurements within the linear range of calibration. Reporting limits were adjusted accordingly.

Comparison between target analyte measurements in sample MA02MW001D and field duplicate sample MA02MW001D-a were within precision acceptance criteria unless specifically noted in an analytical method section. Field precision is used to demonstrate consistency in sample collection and homogeneity in sample matrix.

II. Method SW-846 8260B – Volatile Organics

An estimate concentration of Naphthalene was present in the preparation blank associated with samples MA01MW003, MA01MW001, TB-2, MA01MW004, M114MW003, TB-3 and TB-4. Naphthalene was not detected in these samples. No data qualifications were necessary.

Recovery of surrogate analyte 1,2-Dichloroethane-d4 in sample MA01MW004 exceeded upper acceptance criteria. No detects were reported in this sample. No data qualifications were necessary.

Recovery of Chloromethane in the matrix spike (MS) analysis of sample MA01MW002 exceeded upper acceptance criteria. Acceptable recoveries of this analyte were achieved in the duplicate MS and laboratory control sample (LCS) analyses. The laboratory applied a “J” qualifier to the non-detect result for this analyte in sample MA01MW002. This qualifier was removed.

Recovery of Dichlorodifluoromethane in the continuing calibration verification (CCV) standard preceding the analyses of samples MA01MW002 and TB-1 exceeded upper acceptance criteria. The laboratory applied a “Q” qualifier to these results. This analyte was not detected in these samples. The laboratory qualifiers were removed.

Recovery of Acetone in the CCV standard preceding the analyses of sample TB-7 exceeded upper acceptance criteria. The laboratory applied a “Q” qualifier to this result. This analyte was not detected in the sample. The laboratory qualifier was removed.

All other quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria.

III. Method SW-846 8330A – Explosives

Recoveries of 3-Nitrotoluene and Pentaerythritol Tetranitrate in the MS and MSD analyses of sample MA01MW002 exceeded upper acceptance criteria. Comparisons between measurements of these analytes the MS and MSD exceeded precision acceptance criteria. These analytes were not detected in any field samples. The laboratory applied a "J" qualifier to the non-detect results for these two analytes in sample MA01MW002. The laboratory also applied this qualifier to the results for 2-Amino-4,6-dinitrotoluene and 4-Amino-2,6-dinitrotoluene; however, there were no QC exceedences related to these analytes. These laboratory qualifiers were removed.

All other quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria.

IV. Method SW-846 6020A – TAL metals (total)

Manganese and an estimate concentration of Selenium were present in the preparation blank associated with samples MA01MW001, MA01MW002 and MA01MW003. Manganese was not detected in these samples. The concentrations of Selenium reported for these samples were greater than five times (5x) the blank concentration. No data qualifications were necessary.

Recoveries of Magnesium and Sodium in the MS analyses of sample MA01MW002 exceeded acceptance criteria; however, the un-spiked sample concentrations of these analytes were greater than four times (4x) the concentration of the analyte fortification. No data qualifications were necessary.

All other quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria.

V. Method SW-846 6020A – TAL metals (dissolved)

The validated concentrations of several dissolved metals were greater than the corresponding total metals concentrations. Laboratory results are not qualified based on this relationship. These observations are for informational purposes only.

Recoveries of Dissolved Silver and Dissolved Titanium in the MS and MSD analyses of sample MA01MW002 exceeded lower acceptance criteria. Results for these analytes in samples MA01MW001, MA01MW002 and MA01MW003 were modified to non-detect estimate (UJ). The concentration of Dissolved Titanium in sample MA01MW002 was modified to estimate (J).

Recoveries of Dissolved Magnesium and Dissolved Sodium in the MS and MSD analyses of sample MA01MW002 exceeded acceptance criteria; however, the un-spiked sample concentrations of these analytes were greater than four times (4x) the concentration of the analyte fortification. No data qualifications were necessary.

Recoveries of Dissolved Silver in the MS and MSD analyses of sample MA01MW004 exceeded lower acceptance criteria. Results for this analyte in samples MA01MW004, M114MW001, M114MW002 and M114MW003 were modified to non-detect estimate (UJ).

Recoveries of Dissolved Magnesium and Dissolved Sodium in the MS and MSD analyses of sample MA01MW004 exceeded acceptance criteria; however, the un-spiked sample concentrations of these analytes were greater than four times (4x) the concentration of the analyte fortification. No data qualifications were necessary.

All other quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria.

VI. Method SW-846 7470A – Mercury (total)

Recoveries of Mercury in the MS and MSD analyses of sample MA01MW002 exceeded lower acceptance criteria. The results for Mercury in samples MA01MW001, MA01MW002 and MA01MW003 were modified to non-detect estimate (UJ).

Recoveries of Mercury in the MS and MSD analyses of sample MA01MW004 exceeded lower acceptance criteria. Results for these analytes in samples MA01MW004, M114MW001, M114MW002 and M114MW003 were modified to non-detect estimate (UJ).

All other quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria.

VII. Method SW-846 7470A – Mercury (dissolved)

Recoveries of Dissolved Mercury in the MS and MSD analyses of sample MA01MW002 exceeded lower acceptance criteria. The results for Mercury in samples MA01MW001, MA01MW002 and MA01MW003 were modified to non-detect estimate (UJ).

All other quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria.

VIII. Method EPA 300.0 – Sulfate and Chloride

All quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria; therefore, no data qualifications were necessary.

IX. Method EPA 353.2 – Nitrate and Nitrite

All quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria; therefore, no data qualifications were necessary.

X. Method SW-846 9012B – Total Cyanide

Recoveries of Cyanide in the MS and MSD analyses of sample MA01MW002 and the MS analysis of sample MA02MW001D-a exceeded lower acceptance criteria. No action was required for field sample results reported as estimate concentrations. Results reported as non-detect were modified to non-detect estimate (UJ).

All other quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria.

XI. Method SM 2320B – Total Alkalinity

All quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria; therefore, no data qualifications were necessary.

XII. Method SM 2540C - Total Dissolved Solids

All quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria; therefore, no data qualifications were necessary.

XIII. Method SW-846 6860 – Perchlorate

The Perchlorate analyses were performed by DHL Analytical in Round Rock, Texas. The laboratory results and QA/QC results were reported with “N” qualifiers and noted as “not NELAC certified”. These qualifiers were removed.

All quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria; therefore, no data qualifications were necessary.

XIV. Method EPA 218.6 – Hexavalent Chromium

The Hexavalent Chromium analyses were performed by ALS Environmental in Rochester, New York.

All quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria; therefore, no data qualifications were necessary.

eDATApro

Table 1-1

SUMMARY OF QUALIFIED DATA

Target Compound	Sample(s) Affected	Lab Result	Lab Qual	Val Result	Val Qual	Reason for Qualification
Acetone	TB-7	0.193	UQ	0.193	U	Removal of laboratory qualifier.
Chloromethane	MA01MW002	0.144	UJ	0.144	U	
Dichlorodifluoromethane	MA01MW002	0.145	UQ	0.145	U	
	TB-1	0.145	UQ	0.145	U	
3-Nitrotoluene	MA01MW002	0.33	UJ	0.33	U	
Pentaerythritol Tetranitrate	MA01MW002	0.59	UJ	0.59	U	
2-Amino-4,6-dinitrotoluene	MA01MW002	0.3	UJ	0.3	U	
4-Amino-2,6-dinitrotoluene	MA01MW002	0.36	UJ	0.36	U	
Mercury	M114MW001	0.07	U	0.07	UJ	Low recovery in MS & MSD.
	M114MW002	0.07	U	0.07	UJ	
	M114MW003	0.07	U	0.07	UJ	
	MA01MW001	0.07	U	0.07	UJ	
	MA01MW002	0.07	U	0.07	UJ	
	MA01MW003	0.07	U	0.07	UJ	
	MA01MW004	0.07	U	0.07	UJ	
Mercury, Dissolved	MA01MW001	0.07	U	0.07	UJ	
	MA01MW002	0.07	U	0.07	UJ	
	MA01MW003	0.07	U	0.07	UJ	
Silver, Dissolved	M114MW001	2.5	U	2.5	UJ	
	M114MW002	2.5	U	2.5	UJ	
	M114MW003	2.5	U	2.5	UJ	
	MA01MW001	1.25	U	1.25	UJ	
	MA01MW002	1.25	U	1.25	UJ	
	MA01MW003	1.25	U	1.25	UJ	
	MA01MW004	0.5	U	0.5	UJ	
Titanium, Dissolved	MA01MW001	1.25	U	1.25	UJ	
	MA01MW002	6.02		6.02	J	
	MA01MW003	1.25	U	1.25	UJ	
Cyanide	M114MW001	0.0005	U	0.0005	UJ	
	M114MW002	0.0005	U	0.0005	UJ	
	M114MW003	0.0005	U	0.0005	UJ	
	M114MW004	0.0005	U	0.0005	UJ	
	MA01MW002	0.0005	U	0.0005	UJ	
	MA02MW001D	0.0005	U	0.0005	UJ	
	MA02MW001D-a	0.0005	U	0.0005	UJ	
	MWQ-24	0.0005	U	0.0005	UJ	
Perchlorate	M114MW001	0.00193	N	0.00193		Removal of laboratory qualifier.
	M114MW002	0.00139	N	0.00139		
	M114MW003	0.00227	N	0.00227		

Target Compound	Sample(s) Affected	Lab Result	Lab Qual	Val Result	Val Qual	Reason for Qualification
Perchlorate	M114MW004	0.00149	N	0.00149		Removal of laboratory qualifier.
	MA01MW001	0.000174	JN	0.000174	J	
	MA01MW002	0.00142	N	0.00142		
	MA01MW003	0.0002	JN	0.0002	J	
	MA01MW004	0.00238	N	0.00238		
	MA02MW001D	0.0112	N	0.0112		
	MA02MW001D-a	0.0117	N	0.0117		
	MWQ-24	0.0001	NU	0.0001	U	

Table 1-2

DATA QUALIFIER REFERENCE

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
B	Analyte detected in the method blank of the associated sample batch.	Analyte detected in the calibration/method blank of the associated sample batch.
NJ	The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated numerical value represents its approximate concentration.	Not applicable.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet the quality control criteria. The presence or absence of the analyte cannot be verified.	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet the quality control criteria. The presence or absence of the analyte cannot be verified.

Laboratory Qualifiers

Qualifier	Organics	Inorganics
N	Not NELAC Certified.	Not NELAC Certified.
Q	LCS/LCSD recovery and/or RPD was outside control limits/CCV did not meet acceptance criteria.	LCS/LCSD recovery and/or RPD was outside control limits/CCV did not meet acceptance criteria.

Appendix I
Form 1 Data (Qualified)

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA01MW002**
Location ID: **NA**
Lab Sample ID: **21404241601**
Sample Type: **Site Sample**
Method: **EPA 8260B**

Sample Matrix : **W**
Sample Date: **04/23/2014 10:06**
Analysis Date: **05/05/2014 0:48**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	1	0.12	U	0.12	U	ug/L
71-55-6	1,1,1-Trichloroethane	1	1	0.123	U	0.123	U	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	1	0.109	U	0.109	U	ug/L
79-00-5	1,1,2-Trichloroethane	1	1	0.159	U	0.159	U	ug/L
75-34-3	1,1-Dichloroethane	1	1	0.171	U	0.171	U	ug/L
75-35-4	1,1-Dichloroethene	1	1	0.2	U	0.2	U	ug/L
563-58-6	1,1-Dichloropropene	1	1	0.052	U	0.052	U	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	1	0.079	U	0.079	U	ug/L
96-18-4	1,2,3-Trichloropropane	1	1	0.065	U	0.065	U	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	1	0.105	U	0.105	U	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	1	0.084	U	0.084	U	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	1	1	0.194	U	0.194	U	ug/L
106-93-4	1,2-Dibromoethane	1	1	0.102	U	0.102	U	ug/L
95-50-1	1,2-Dichlorobenzene	1	1	0.135	U	0.135	U	ug/L
107-06-2	1,2-Dichloroethane	1	1	0.116	U	0.116	U	ug/L
78-87-5	1,2-Dichloropropane	1	1	0.15	U	0.15	U	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	1	0.066	U	0.066	U	ug/L
541-73-1	1,3-Dichlorobenzene	1	1	0.138	U	0.138	U	ug/L
142-28-9	1,3-Dichloropropane	1	1	0.059	U	0.059	U	ug/L
106-46-7	1,4-Dichlorobenzene	1	1	0.083	U	0.083	U	ug/L
594-20-7	2,2-Dichloropropane	1	1	0.17	U	0.17	U	ug/L
78-93-3	2-Butanone	1	5	0.142	U	0.142	U	ug/L
95-49-8	2-Chlorotoluene	1	1	0.08	U	0.08	U	ug/L
591-78-6	2-Hexanone	1	5	0.122	U	0.122	U	ug/L
106-43-4	4-Chlorotoluene	1	1	0.124	U	0.124	U	ug/L
99-87-6	4-Isopropyltoluene	1	1	0.07	U	0.07	U	ug/L
108-10-1	4-Methyl-2-pentanone	1	5	0.12	U	0.12	U	ug/L
67-64-1	Acetone	1	5	0.193	U	0.193	U	ug/L
71-43-2	Benzene	1	1	0.111	U	0.111	U	ug/L
108-86-1	Bromobenzene	1	1	0.145	U	0.145	U	ug/L
74-97-5	Bromochloromethane	1	1	0.127	U	0.127	U	ug/L
75-27-4	Bromodichloromethane	1	1	0.083	U	0.083	U	ug/L
75-25-2	Bromoform	1	1	0.215	U	0.215	U	ug/L
74-83-9	Bromomethane	1	1	0.427	U	0.427	U	ug/L
75-15-0	Carbon disulfide	1	1	0.19	U	0.19	U	ug/L
56-23-5	Carbon tetrachloride	1	1	0.248	U	0.248	U	ug/L
108-90-7	Chlorobenzene	1	1	0.083	U	0.083	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA01MW002**
Location ID: **NA**
Lab Sample ID: **21404241601**
Sample Type: **Site Sample**
Method: **EPA 8260B**

Sample Matrix : **W**
Sample Date: **04/23/2014 10:06**
Analysis Date: **05/05/2014 0:48**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
75-00-3	Chloroethane	1	1	0.235	U	0.235	U	ug/L	
67-66-3	Chloroform	1	1	0.155	U	0.155	U	ug/L	
74-87-3	Chloromethane	1	1	0.144	UJ	0.144	U	ug/L	*
156-59-2	cis-1,2-Dichloroethene	1	1	0.103	U	0.103	U	ug/L	
10061-01-5	cis-1,3-Dichloropropene	1	1	0.124	U	0.124	U	ug/L	
74-95-3	Dibromomethane	1	1	0.211	U	0.211	U	ug/L	
75-71-8	Dichlorodifluoromethane	1	1	0.145	UQ	0.145	U	ug/L	*
100-41-4	Ethylbenzene	1	1	0.109	U	0.109	U	ug/L	
87-68-3	Hexachlorobutadiene	1	1	0.265	U	0.265	U	ug/L	
98-82-8	Isopropylbenzene (Cumene)	1	1	0.13	U	0.13	U	ug/L	
136777-61-2	m,p-Xylene	1	2	0.123	U	0.123	U	ug/L	
75-09-2	Methylene chloride	1	5	0.149	U	0.149	U	ug/L	
91-20-3	Naphthalene	1	1	0.176	U	0.176	U	ug/L	
104-51-8	n-Butylbenzene	1	1	0.123	U	0.123	U	ug/L	
103-65-1	n-Propylbenzene	1	1	0.727	U	0.727	U	ug/L	
95-47-6	o-Xylene	1	1	0.055	U	0.055	U	ug/L	
135-98-8	sec-Butylbenzene	1	1	0.107	U	0.107	U	ug/L	
100-42-5	Styrene	1	1	0.089	U	0.089	U	ug/L	
1634-04-4	tert-Butyl methyl ether (MTBE)	1	5	0.078	U	0.078	U	ug/L	
98-06-6	tert-Butylbenzene	1	1	0.087	U	0.087	U	ug/L	
127-18-4	Tetrachloroethene	1	1	0.193	U	0.193	U	ug/L	
108-88-3	Toluene	1	1	0.122	U	0.122	U	ug/L	
156-60-5	trans-1,2-Dichloroethene	1	1	0.077	U	0.077	U	ug/L	
10061-02-6	trans-1,3-Dichloropropene	1	1	0.128	U	0.128	U	ug/L	
79-01-6	Trichloroethene	1	1	0.161	U	0.161	U	ug/L	
75-69-4	Trichlorofluoromethane	1	1	0.157	U	0.157	U	ug/L	
75-01-4	Vinyl chloride	1	1	0.127	U	0.127	U	ug/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **TB-1**
Location ID: **NA**
Lab Sample ID: **21404241604**
Sample Type: **Trip Blank**
Method: **EPA 8260B**

Sample Matrix : **W**
Sample Date: **04/23/2014 10:06**
Analysis Date: **05/05/2014 3:26**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	1	0.12	U	0.12	U	ug/L
71-55-6	1,1,1-Trichloroethane	1	1	0.123	U	0.123	U	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	1	0.109	U	0.109	U	ug/L
79-00-5	1,1,2-Trichloroethane	1	1	0.159	U	0.159	U	ug/L
75-34-3	1,1-Dichloroethane	1	1	0.171	U	0.171	U	ug/L
75-35-4	1,1-Dichloroethene	1	1	0.2	U	0.2	U	ug/L
563-58-6	1,1-Dichloropropene	1	1	0.052	U	0.052	U	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	1	0.079	U	0.079	U	ug/L
96-18-4	1,2,3-Trichloropropane	1	1	0.065	U	0.065	U	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	1	0.105	U	0.105	U	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	1	0.084	U	0.084	U	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	1	1	0.194	U	0.194	U	ug/L
106-93-4	1,2-Dibromoethane	1	1	0.102	U	0.102	U	ug/L
95-50-1	1,2-Dichlorobenzene	1	1	0.135	U	0.135	U	ug/L
107-06-2	1,2-Dichloroethane	1	1	0.116	U	0.116	U	ug/L
78-87-5	1,2-Dichloropropane	1	1	0.15	U	0.15	U	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	1	0.066	U	0.066	U	ug/L
541-73-1	1,3-Dichlorobenzene	1	1	0.138	U	0.138	U	ug/L
142-28-9	1,3-Dichloropropane	1	1	0.059	U	0.059	U	ug/L
106-46-7	1,4-Dichlorobenzene	1	1	0.083	U	0.083	U	ug/L
594-20-7	2,2-Dichloropropane	1	1	0.17	U	0.17	U	ug/L
78-93-3	2-Butanone	1	5	0.142	U	0.142	U	ug/L
95-49-8	2-Chlorotoluene	1	1	0.08	U	0.08	U	ug/L
591-78-6	2-Hexanone	1	5	0.122	U	0.122	U	ug/L
106-43-4	4-Chlorotoluene	1	1	0.124	U	0.124	U	ug/L
99-87-6	4-Isopropyltoluene	1	1	0.07	U	0.07	U	ug/L
108-10-1	4-Methyl-2-pentanone	1	5	0.12	U	0.12	U	ug/L
67-64-1	Acetone	1	5	0.193	U	0.193	U	ug/L
71-43-2	Benzene	1	1	0.111	U	0.111	U	ug/L
108-86-1	Bromobenzene	1	1	0.145	U	0.145	U	ug/L
74-97-5	Bromochloromethane	1	1	0.127	U	0.127	U	ug/L
75-27-4	Bromodichloromethane	1	1	0.083	U	0.083	U	ug/L
75-25-2	Bromoform	1	1	0.215	U	0.215	U	ug/L
74-83-9	Bromomethane	1	1	0.427	U	0.427	U	ug/L
75-15-0	Carbon disulfide	1	1	0.19	U	0.19	U	ug/L
56-23-5	Carbon tetrachloride	1	1	0.248	U	0.248	U	ug/L
108-90-7	Chlorobenzene	1	1	0.083	U	0.083	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **TB-1**
Location ID: **NA**
Lab Sample ID: **21404241604**
Sample Type: **Trip Blank**
Method: **EPA 8260B**

Sample Matrix : **W**
Sample Date: **04/23/2014 10:06**
Analysis Date: **05/05/2014 3:26**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
75-00-3	Chloroethane	1	1	0.235	U	0.235	U	ug/L	
67-66-3	Chloroform	1	1	0.155	U	0.155	U	ug/L	
74-87-3	Chloromethane	1	1	0.144	U	0.144	U	ug/L	
156-59-2	cis-1,2-Dichloroethene	1	1	0.103	U	0.103	U	ug/L	
10061-01-5	cis-1,3-Dichloropropene	1	1	0.124	U	0.124	U	ug/L	
74-95-3	Dibromomethane	1	1	0.211	U	0.211	U	ug/L	
75-71-8	Dichlorodifluoromethane	1	1	0.145	UQ	0.145	U	ug/L	*
100-41-4	Ethylbenzene	1	1	0.109	U	0.109	U	ug/L	
87-68-3	Hexachlorobutadiene	1	1	0.265	U	0.265	U	ug/L	
98-82-8	Isopropylbenzene (Cumene)	1	1	0.13	U	0.13	U	ug/L	
136777-61-2	m,p-Xylene	1	2	0.123	U	0.123	U	ug/L	
75-09-2	Methylene chloride	1	5	0.149	U	0.149	U	ug/L	
91-20-3	Naphthalene	1	1	0.176	U	0.176	U	ug/L	
104-51-8	n-Butylbenzene	1	1	0.123	U	0.123	U	ug/L	
103-65-1	n-Propylbenzene	1	1	0.727	U	0.727	U	ug/L	
95-47-6	o-Xylene	1	1	0.055	U	0.055	U	ug/L	
135-98-8	sec-Butylbenzene	1	1	0.107	U	0.107	U	ug/L	
100-42-5	Styrene	1	1	0.089	U	0.089	U	ug/L	
1634-04-4	tert-Butyl methyl ether (MTBE)	1	5	0.078	U	0.078	U	ug/L	
98-06-6	tert-Butylbenzene	1	1	0.087	U	0.087	U	ug/L	
127-18-4	Tetrachloroethene	1	1	0.193	U	0.193	U	ug/L	
108-88-3	Toluene	1	1	0.122	U	0.122	U	ug/L	
156-60-5	trans-1,2-Dichloroethene	1	1	0.077	U	0.077	U	ug/L	
10061-02-6	trans-1,3-Dichloropropene	1	1	0.128	U	0.128	U	ug/L	
79-01-6	Trichloroethene	1	1	0.161	U	0.161	U	ug/L	
75-69-4	Trichlorofluoromethane	1	1	0.157	U	0.157	U	ug/L	
75-01-4	Vinyl chloride	1	1	0.127	U	0.127	U	ug/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA01MW003**
Location ID: **NA**
Lab Sample ID: **21404241605**
Sample Type: **Site Sample**
Method: **EPA 8260B**

Sample Matrix : **W**
Sample Date: **04/23/2014 13:08**
Analysis Date: **05/05/2014 11:25**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	1	0.12	U	0.12	U	ug/L
71-55-6	1,1,1-Trichloroethane	1	1	0.123	U	0.123	U	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	1	0.109	U	0.109	U	ug/L
79-00-5	1,1,2-Trichloroethane	1	1	0.159	U	0.159	U	ug/L
75-34-3	1,1-Dichloroethane	1	1	0.171	U	0.171	U	ug/L
75-35-4	1,1-Dichloroethene	1	1	0.2	U	0.2	U	ug/L
563-58-6	1,1-Dichloropropene	1	1	0.052	U	0.052	U	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	1	0.079	U	0.079	U	ug/L
96-18-4	1,2,3-Trichloropropane	1	1	0.065	U	0.065	U	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	1	0.105	U	0.105	U	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	1	0.084	U	0.084	U	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	1	1	0.194	U	0.194	U	ug/L
106-93-4	1,2-Dibromoethane	1	1	0.102	U	0.102	U	ug/L
95-50-1	1,2-Dichlorobenzene	1	1	0.135	U	0.135	U	ug/L
107-06-2	1,2-Dichloroethane	1	1	0.116	U	0.116	U	ug/L
78-87-5	1,2-Dichloropropane	1	1	0.15	U	0.15	U	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	1	0.066	U	0.066	U	ug/L
541-73-1	1,3-Dichlorobenzene	1	1	0.138	U	0.138	U	ug/L
142-28-9	1,3-Dichloropropane	1	1	0.059	U	0.059	U	ug/L
106-46-7	1,4-Dichlorobenzene	1	1	0.083	U	0.083	U	ug/L
594-20-7	2,2-Dichloropropane	1	1	0.17	U	0.17	U	ug/L
78-93-3	2-Butanone	1	5	0.142	U	0.142	U	ug/L
95-49-8	2-Chlorotoluene	1	1	0.08	U	0.08	U	ug/L
591-78-6	2-Hexanone	1	5	0.122	U	0.122	U	ug/L
106-43-4	4-Chlorotoluene	1	1	0.124	U	0.124	U	ug/L
99-87-6	4-Isopropyltoluene	1	1	0.07	U	0.07	U	ug/L
108-10-1	4-Methyl-2-pentanone	1	5	0.12	U	0.12	U	ug/L
67-64-1	Acetone	1	5	0.193	U	0.193	U	ug/L
71-43-2	Benzene	1	1	0.111	U	0.111	U	ug/L
108-86-1	Bromobenzene	1	1	0.145	U	0.145	U	ug/L
74-97-5	Bromochloromethane	1	1	0.127	U	0.127	U	ug/L
75-27-4	Bromodichloromethane	1	1	0.083	U	0.083	U	ug/L
75-25-2	Bromoform	1	1	0.215	U	0.215	U	ug/L
74-83-9	Bromomethane	1	1	0.427	U	0.427	U	ug/L
75-15-0	Carbon disulfide	1	1	0.19	U	0.19	U	ug/L
56-23-5	Carbon tetrachloride	1	1	0.248	U	0.248	U	ug/L
108-90-7	Chlorobenzene	1	1	0.083	U	0.083	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA01MW003**
Location ID: **NA**
Lab Sample ID: **21404241605**
Sample Type: **Site Sample**
Method: **EPA 8260B**

Sample Matrix : **W**
Sample Date: **04/23/2014 13:08**
Analysis Date: **05/05/2014 11:25**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
75-00-3	Chloroethane	1	1	0.235	U	0.235	U	ug/L
67-66-3	Chloroform	1	1	0.155	U	0.155	U	ug/L
74-87-3	Chloromethane	1	1	0.144	U	0.144	U	ug/L
156-59-2	cis-1,2-Dichloroethene	1	1	0.103	U	0.103	U	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	1	0.124	U	0.124	U	ug/L
74-95-3	Dibromomethane	1	1	0.211	U	0.211	U	ug/L
75-71-8	Dichlorodifluoromethane	1	1	0.145	U	0.145	U	ug/L
100-41-4	Ethylbenzene	1	1	0.109	U	0.109	U	ug/L
87-68-3	Hexachlorobutadiene	1	1	0.265	U	0.265	U	ug/L
98-82-8	Isopropylbenzene (Cumene)	1	1	0.13	U	0.13	U	ug/L
136777-61-2	m,p-Xylene	1	2	0.123	U	0.123	U	ug/L
75-09-2	Methylene chloride	1	5	0.149	U	0.149	U	ug/L
91-20-3	Naphthalene	1	1	0.176	U	0.176	U	ug/L
104-51-8	n-Butylbenzene	1	1	0.123	U	0.123	U	ug/L
103-65-1	n-Propylbenzene	1	1	0.727	U	0.727	U	ug/L
95-47-6	o-Xylene	1	1	0.055	U	0.055	U	ug/L
135-98-8	sec-Butylbenzene	1	1	0.107	U	0.107	U	ug/L
100-42-5	Styrene	1	1	0.089	U	0.089	U	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	1	5	0.078	U	0.078	U	ug/L
98-06-6	tert-Butylbenzene	1	1	0.087	U	0.087	U	ug/L
127-18-4	Tetrachloroethene	1	1	0.193	U	0.193	U	ug/L
108-88-3	Toluene	1	1	0.122	U	0.122	U	ug/L
156-60-5	trans-1,2-Dichloroethene	1	1	0.077	U	0.077	U	ug/L
10061-02-6	trans-1,3-Dichloropropene	1	1	0.128	U	0.128	U	ug/L
79-01-6	Trichloroethene	1	1	0.161	U	0.161	U	ug/L
75-69-4	Trichlorofluoromethane	1	1	0.157	U	0.157	U	ug/L
75-01-4	Vinyl chloride	1	1	0.127	U	0.127	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA01MW001**
Location ID: **NA**
Lab Sample ID: **21404241606**
Sample Type: **Site Sample**
Method: **EPA 8260B**

Sample Matrix : **W**
Sample Date: **04/23/2014 14:16**
Analysis Date: **05/05/2014 11:48**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	1	0.12	U	0.12	U	ug/L
71-55-6	1,1,1-Trichloroethane	1	1	0.123	U	0.123	U	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	1	0.109	U	0.109	U	ug/L
79-00-5	1,1,2-Trichloroethane	1	1	0.159	U	0.159	U	ug/L
75-34-3	1,1-Dichloroethane	1	1	0.171	U	0.171	U	ug/L
75-35-4	1,1-Dichloroethene	1	1	0.2	U	0.2	U	ug/L
563-58-6	1,1-Dichloropropene	1	1	0.052	U	0.052	U	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	1	0.079	U	0.079	U	ug/L
96-18-4	1,2,3-Trichloropropane	1	1	0.065	U	0.065	U	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	1	0.105	U	0.105	U	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	1	0.084	U	0.084	U	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	1	1	0.194	U	0.194	U	ug/L
106-93-4	1,2-Dibromoethane	1	1	0.102	U	0.102	U	ug/L
95-50-1	1,2-Dichlorobenzene	1	1	0.135	U	0.135	U	ug/L
107-06-2	1,2-Dichloroethane	1	1	0.116	U	0.116	U	ug/L
78-87-5	1,2-Dichloropropane	1	1	0.15	U	0.15	U	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	1	0.066	U	0.066	U	ug/L
541-73-1	1,3-Dichlorobenzene	1	1	0.138	U	0.138	U	ug/L
142-28-9	1,3-Dichloropropane	1	1	0.059	U	0.059	U	ug/L
106-46-7	1,4-Dichlorobenzene	1	1	0.083	U	0.083	U	ug/L
594-20-7	2,2-Dichloropropane	1	1	0.17	U	0.17	U	ug/L
78-93-3	2-Butanone	1	5	0.142	U	0.142	U	ug/L
95-49-8	2-Chlorotoluene	1	1	0.08	U	0.08	U	ug/L
591-78-6	2-Hexanone	1	5	0.122	U	0.122	U	ug/L
106-43-4	4-Chlorotoluene	1	1	0.124	U	0.124	U	ug/L
99-87-6	4-Isopropyltoluene	1	1	0.07	U	0.07	U	ug/L
108-10-1	4-Methyl-2-pentanone	1	5	0.12	U	0.12	U	ug/L
67-64-1	Acetone	1	5	1.38	J	1.38	J	ug/L
71-43-2	Benzene	1	1	0.111	U	0.111	U	ug/L
108-86-1	Bromobenzene	1	1	0.145	U	0.145	U	ug/L
74-97-5	Bromochloromethane	1	1	0.127	U	0.127	U	ug/L
75-27-4	Bromodichloromethane	1	1	0.083	U	0.083	U	ug/L
75-25-2	Bromoform	1	1	0.215	U	0.215	U	ug/L
74-83-9	Bromomethane	1	1	0.427	U	0.427	U	ug/L
75-15-0	Carbon disulfide	1	1	0.19	U	0.19	U	ug/L
56-23-5	Carbon tetrachloride	1	1	0.248	U	0.248	U	ug/L
108-90-7	Chlorobenzene	1	1	0.083	U	0.083	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA01MW001**
Location ID: **NA**
Lab Sample ID: **21404241606**
Sample Type: **Site Sample**
Method: **EPA 8260B**

Sample Matrix : **W**
Sample Date: **04/23/2014 14:16**
Analysis Date: **05/05/2014 11:48**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
75-00-3	Chloroethane	1	1	0.235	U	0.235	U	ug/L
67-66-3	Chloroform	1	1	0.155	U	0.155	U	ug/L
74-87-3	Chloromethane	1	1	0.144	U	0.144	U	ug/L
156-59-2	cis-1,2-Dichloroethene	1	1	0.103	U	0.103	U	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	1	0.124	U	0.124	U	ug/L
74-95-3	Dibromomethane	1	1	0.211	U	0.211	U	ug/L
75-71-8	Dichlorodifluoromethane	1	1	0.145	U	0.145	U	ug/L
100-41-4	Ethylbenzene	1	1	0.109	U	0.109	U	ug/L
87-68-3	Hexachlorobutadiene	1	1	0.265	U	0.265	U	ug/L
98-82-8	Isopropylbenzene (Cumene)	1	1	0.13	U	0.13	U	ug/L
136777-61-2	m,p-Xylene	1	2	0.123	U	0.123	U	ug/L
75-09-2	Methylene chloride	1	5	0.149	U	0.149	U	ug/L
91-20-3	Naphthalene	1	1	0.176	U	0.176	U	ug/L
104-51-8	n-Butylbenzene	1	1	0.123	U	0.123	U	ug/L
103-65-1	n-Propylbenzene	1	1	0.727	U	0.727	U	ug/L
95-47-6	o-Xylene	1	1	0.055	U	0.055	U	ug/L
135-98-8	sec-Butylbenzene	1	1	0.107	U	0.107	U	ug/L
100-42-5	Styrene	1	1	0.089	U	0.089	U	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	1	5	0.078	U	0.078	U	ug/L
98-06-6	tert-Butylbenzene	1	1	0.087	U	0.087	U	ug/L
127-18-4	Tetrachloroethene	1	1	0.193	U	0.193	U	ug/L
108-88-3	Toluene	1	1	0.122	U	0.122	U	ug/L
156-60-5	trans-1,2-Dichloroethene	1	1	0.077	U	0.077	U	ug/L
10061-02-6	trans-1,3-Dichloropropene	1	1	0.128	U	0.128	U	ug/L
79-01-6	Trichloroethene	1	1	0.161	U	0.161	U	ug/L
75-69-4	Trichlorofluoromethane	1	1	0.157	U	0.157	U	ug/L
75-01-4	Vinyl chloride	1	1	0.127	U	0.127	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **TB-2**
Location ID: **NA**
Lab Sample ID: **21404241607**
Sample Type: **Trip Blank**
Method: **EPA 8260B**

Sample Matrix : **W**
Sample Date: **04/23/2014 14:16**
Analysis Date: **05/05/2014 12:11**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	1	0.12	U	0.12	U	ug/L
71-55-6	1,1,1-Trichloroethane	1	1	0.123	U	0.123	U	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	1	0.109	U	0.109	U	ug/L
79-00-5	1,1,2-Trichloroethane	1	1	0.159	U	0.159	U	ug/L
75-34-3	1,1-Dichloroethane	1	1	0.171	U	0.171	U	ug/L
75-35-4	1,1-Dichloroethene	1	1	0.2	U	0.2	U	ug/L
563-58-6	1,1-Dichloropropene	1	1	0.052	U	0.052	U	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	1	0.079	U	0.079	U	ug/L
96-18-4	1,2,3-Trichloropropane	1	1	0.065	U	0.065	U	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	1	0.105	U	0.105	U	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	1	0.084	U	0.084	U	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	1	1	0.194	U	0.194	U	ug/L
106-93-4	1,2-Dibromoethane	1	1	0.102	U	0.102	U	ug/L
95-50-1	1,2-Dichlorobenzene	1	1	0.135	U	0.135	U	ug/L
107-06-2	1,2-Dichloroethane	1	1	0.116	U	0.116	U	ug/L
78-87-5	1,2-Dichloropropane	1	1	0.15	U	0.15	U	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	1	0.066	U	0.066	U	ug/L
541-73-1	1,3-Dichlorobenzene	1	1	0.138	U	0.138	U	ug/L
142-28-9	1,3-Dichloropropane	1	1	0.059	U	0.059	U	ug/L
106-46-7	1,4-Dichlorobenzene	1	1	0.083	U	0.083	U	ug/L
594-20-7	2,2-Dichloropropane	1	1	0.17	U	0.17	U	ug/L
78-93-3	2-Butanone	1	5	0.142	U	0.142	U	ug/L
95-49-8	2-Chlorotoluene	1	1	0.08	U	0.08	U	ug/L
591-78-6	2-Hexanone	1	5	0.122	U	0.122	U	ug/L
106-43-4	4-Chlorotoluene	1	1	0.124	U	0.124	U	ug/L
99-87-6	4-Isopropyltoluene	1	1	0.07	U	0.07	U	ug/L
108-10-1	4-Methyl-2-pentanone	1	5	0.12	U	0.12	U	ug/L
67-64-1	Acetone	1	5	0.193	U	0.193	U	ug/L
71-43-2	Benzene	1	1	0.111	U	0.111	U	ug/L
108-86-1	Bromobenzene	1	1	0.145	U	0.145	U	ug/L
74-97-5	Bromochloromethane	1	1	0.127	U	0.127	U	ug/L
75-27-4	Bromodichloromethane	1	1	0.083	U	0.083	U	ug/L
75-25-2	Bromoform	1	1	0.215	U	0.215	U	ug/L
74-83-9	Bromomethane	1	1	0.427	U	0.427	U	ug/L
75-15-0	Carbon disulfide	1	1	0.19	U	0.19	U	ug/L
56-23-5	Carbon tetrachloride	1	1	0.248	U	0.248	U	ug/L
108-90-7	Chlorobenzene	1	1	0.083	U	0.083	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **TB-2** | Sample Matrix : **W** | Total/Dissolved: **T**

Location ID: **NA** | Sample Date: **04/23/2014 14:16** | Lab: **GCAL**

Lab Sample ID: **21404241607** | Analysis Date: **05/05/2014 12:11**

Sample Type: **Trip Blank**

Method: **EPA 8260B**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
75-00-3	Chloroethane	1	1	0.235	U	0.235	U	ug/L
67-66-3	Chloroform	1	1	0.155	U	0.155	U	ug/L
74-87-3	Chloromethane	1	1	0.144	U	0.144	U	ug/L
156-59-2	cis-1,2-Dichloroethene	1	1	0.103	U	0.103	U	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	1	0.124	U	0.124	U	ug/L
74-95-3	Dibromomethane	1	1	0.211	U	0.211	U	ug/L
75-71-8	Dichlorodifluoromethane	1	1	0.145	U	0.145	U	ug/L
100-41-4	Ethylbenzene	1	1	0.109	U	0.109	U	ug/L
87-68-3	Hexachlorobutadiene	1	1	0.265	U	0.265	U	ug/L
98-82-8	Isopropylbenzene (Cumene)	1	1	0.13	U	0.13	U	ug/L
136777-61-2	m,p-Xylene	1	2	0.123	U	0.123	U	ug/L
75-09-2	Methylene chloride	1	5	1.2	J	1.2	J	ug/L
91-20-3	Naphthalene	1	1	0.176	U	0.176	U	ug/L
104-51-8	n-Butylbenzene	1	1	0.123	U	0.123	U	ug/L
103-65-1	n-Propylbenzene	1	1	0.727	U	0.727	U	ug/L
95-47-6	o-Xylene	1	1	0.055	U	0.055	U	ug/L
135-98-8	sec-Butylbenzene	1	1	0.107	U	0.107	U	ug/L
100-42-5	Styrene	1	1	0.089	U	0.089	U	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	1	5	0.078	U	0.078	U	ug/L
98-06-6	tert-Butylbenzene	1	1	0.087	U	0.087	U	ug/L
127-18-4	Tetrachloroethene	1	1	0.193	U	0.193	U	ug/L
108-88-3	Toluene	1	1	0.122	U	0.122	U	ug/L
156-60-5	trans-1,2-Dichloroethene	1	1	0.077	U	0.077	U	ug/L
10061-02-6	trans-1,3-Dichloropropene	1	1	0.128	U	0.128	U	ug/L
79-01-6	Trichloroethene	1	1	0.161	U	0.161	U	ug/L
75-69-4	Trichlorofluoromethane	1	1	0.157	U	0.157	U	ug/L
75-01-4	Vinyl chloride	1	1	0.127	U	0.127	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA01MW004**
Location ID: **NA**
Lab Sample ID: **21404241608**
Sample Type: **Site Sample**
Method: **EPA 8260B**

Sample Matrix : **W**
Sample Date: **04/24/2014 10:10**
Analysis Date: **05/05/2014 19:19**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	1	0.12	U	0.12	U	ug/L
71-55-6	1,1,1-Trichloroethane	1	1	0.123	U	0.123	U	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	1	0.109	U	0.109	U	ug/L
79-00-5	1,1,2-Trichloroethane	1	1	0.159	U	0.159	U	ug/L
75-34-3	1,1-Dichloroethane	1	1	0.171	U	0.171	U	ug/L
75-35-4	1,1-Dichloroethene	1	1	0.2	U	0.2	U	ug/L
563-58-6	1,1-Dichloropropene	1	1	0.052	U	0.052	U	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	1	0.079	U	0.079	U	ug/L
96-18-4	1,2,3-Trichloropropane	1	1	0.065	U	0.065	U	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	1	0.105	U	0.105	U	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	1	0.084	U	0.084	U	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	1	1	0.194	U	0.194	U	ug/L
106-93-4	1,2-Dibromoethane	1	1	0.102	U	0.102	U	ug/L
95-50-1	1,2-Dichlorobenzene	1	1	0.135	U	0.135	U	ug/L
107-06-2	1,2-Dichloroethane	1	1	0.116	U	0.116	U	ug/L
78-87-5	1,2-Dichloropropane	1	1	0.15	U	0.15	U	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	1	0.066	U	0.066	U	ug/L
541-73-1	1,3-Dichlorobenzene	1	1	0.138	U	0.138	U	ug/L
142-28-9	1,3-Dichloropropane	1	1	0.059	U	0.059	U	ug/L
106-46-7	1,4-Dichlorobenzene	1	1	0.083	U	0.083	U	ug/L
594-20-7	2,2-Dichloropropane	1	1	0.17	U	0.17	U	ug/L
78-93-3	2-Butanone	1	5	0.142	U	0.142	U	ug/L
95-49-8	2-Chlorotoluene	1	1	0.08	U	0.08	U	ug/L
591-78-6	2-Hexanone	1	5	0.122	U	0.122	U	ug/L
106-43-4	4-Chlorotoluene	1	1	0.124	U	0.124	U	ug/L
99-87-6	4-Isopropyltoluene	1	1	0.07	U	0.07	U	ug/L
108-10-1	4-Methyl-2-pentanone	1	5	0.12	U	0.12	U	ug/L
67-64-1	Acetone	1	5	0.193	U	0.193	U	ug/L
71-43-2	Benzene	1	1	0.111	U	0.111	U	ug/L
108-86-1	Bromobenzene	1	1	0.145	U	0.145	U	ug/L
74-97-5	Bromochloromethane	1	1	0.127	U	0.127	U	ug/L
75-27-4	Bromodichloromethane	1	1	0.083	U	0.083	U	ug/L
75-25-2	Bromoform	1	1	0.215	U	0.215	U	ug/L
74-83-9	Bromomethane	1	1	0.427	U	0.427	U	ug/L
75-15-0	Carbon disulfide	1	1	0.19	U	0.19	U	ug/L
56-23-5	Carbon tetrachloride	1	1	0.248	U	0.248	U	ug/L
108-90-7	Chlorobenzene	1	1	0.083	U	0.083	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA01MW004**
Location ID: **NA**
Lab Sample ID: **21404241608**
Sample Type: **Site Sample**
Method: **EPA 8260B**

Sample Matrix : **W**
Sample Date: **04/24/2014 10:10**
Analysis Date: **05/05/2014 19:19**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
75-00-3	Chloroethane	1	1	0.235	U	0.235	U	ug/L
67-66-3	Chloroform	1	1	0.155	U	0.155	U	ug/L
74-87-3	Chloromethane	1	1	0.144	U	0.144	U	ug/L
156-59-2	cis-1,2-Dichloroethene	1	1	0.103	U	0.103	U	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	1	0.124	U	0.124	U	ug/L
74-95-3	Dibromomethane	1	1	0.211	U	0.211	U	ug/L
75-71-8	Dichlorodifluoromethane	1	1	0.145	U	0.145	U	ug/L
100-41-4	Ethylbenzene	1	1	0.109	U	0.109	U	ug/L
87-68-3	Hexachlorobutadiene	1	1	0.265	U	0.265	U	ug/L
98-82-8	Isopropylbenzene (Cumene)	1	1	0.13	U	0.13	U	ug/L
136777-61-2	m,p-Xylene	1	2	0.123	U	0.123	U	ug/L
75-09-2	Methylene chloride	1	5	0.149	U	0.149	U	ug/L
91-20-3	Naphthalene	1	1	0.176	U	0.176	U	ug/L
104-51-8	n-Butylbenzene	1	1	0.123	U	0.123	U	ug/L
103-65-1	n-Propylbenzene	1	1	0.727	U	0.727	U	ug/L
95-47-6	o-Xylene	1	1	0.055	U	0.055	U	ug/L
135-98-8	sec-Butylbenzene	1	1	0.107	U	0.107	U	ug/L
100-42-5	Styrene	1	1	0.089	U	0.089	U	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	1	5	0.078	U	0.078	U	ug/L
98-06-6	tert-Butylbenzene	1	1	0.087	U	0.087	U	ug/L
127-18-4	Tetrachloroethene	1	1	0.193	U	0.193	U	ug/L
108-88-3	Toluene	1	1	0.122	U	0.122	U	ug/L
156-60-5	trans-1,2-Dichloroethene	1	1	0.077	U	0.077	U	ug/L
10061-02-6	trans-1,3-Dichloropropene	1	1	0.128	U	0.128	U	ug/L
79-01-6	Trichloroethene	1	1	0.161	U	0.161	U	ug/L
75-69-4	Trichlorofluoromethane	1	1	0.157	U	0.157	U	ug/L
75-01-4	Vinyl chloride	1	1	0.127	U	0.127	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **M114MW003** | Sample Matrix : **W** | Total/Dissolved: **T**

Location ID: **NA** | Sample Date: **04/24/2014 12:00** | Lab: **GCAL**

Lab Sample ID: **21404241609** | Analysis Date: **05/05/2014 19:43**

Sample Type: **Site Sample**

Method: **EPA 8260B**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	1	0.12	U	0.12	U	ug/L
71-55-6	1,1,1-Trichloroethane	1	1	0.123	U	0.123	U	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	1	0.109	U	0.109	U	ug/L
79-00-5	1,1,2-Trichloroethane	1	1	0.159	U	0.159	U	ug/L
75-34-3	1,1-Dichloroethane	1	1	0.171	U	0.171	U	ug/L
75-35-4	1,1-Dichloroethene	1	1	0.2	U	0.2	U	ug/L
563-58-6	1,1-Dichloropropene	1	1	0.052	U	0.052	U	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	1	0.079	U	0.079	U	ug/L
96-18-4	1,2,3-Trichloropropane	1	1	0.065	U	0.065	U	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	1	0.105	U	0.105	U	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	1	0.084	U	0.084	U	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	1	1	0.194	U	0.194	U	ug/L
106-93-4	1,2-Dibromoethane	1	1	0.102	U	0.102	U	ug/L
95-50-1	1,2-Dichlorobenzene	1	1	0.135	U	0.135	U	ug/L
107-06-2	1,2-Dichloroethane	1	1	0.116	U	0.116	U	ug/L
78-87-5	1,2-Dichloropropane	1	1	0.15	U	0.15	U	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	1	0.066	U	0.066	U	ug/L
541-73-1	1,3-Dichlorobenzene	1	1	0.138	U	0.138	U	ug/L
142-28-9	1,3-Dichloropropane	1	1	0.059	U	0.059	U	ug/L
106-46-7	1,4-Dichlorobenzene	1	1	0.083	U	0.083	U	ug/L
594-20-7	2,2-Dichloropropane	1	1	0.17	U	0.17	U	ug/L
78-93-3	2-Butanone	1	5	0.142	U	0.142	U	ug/L
95-49-8	2-Chlorotoluene	1	1	0.08	U	0.08	U	ug/L
591-78-6	2-Hexanone	1	5	0.122	U	0.122	U	ug/L
106-43-4	4-Chlorotoluene	1	1	0.124	U	0.124	U	ug/L
99-87-6	4-Isopropyltoluene	1	1	0.07	U	0.07	U	ug/L
108-10-1	4-Methyl-2-pentanone	1	5	0.12	U	0.12	U	ug/L
67-64-1	Acetone	1	5	0.193	U	0.193	U	ug/L
71-43-2	Benzene	1	1	0.111	U	0.111	U	ug/L
108-86-1	Bromobenzene	1	1	0.145	U	0.145	U	ug/L
74-97-5	Bromochloromethane	1	1	0.127	U	0.127	U	ug/L
75-27-4	Bromodichloromethane	1	1	0.083	U	0.083	U	ug/L
75-25-2	Bromoform	1	1	0.215	U	0.215	U	ug/L
74-83-9	Bromomethane	1	1	0.427	U	0.427	U	ug/L
75-15-0	Carbon disulfide	1	1	0.19	U	0.19	U	ug/L
56-23-5	Carbon tetrachloride	1	1	0.248	U	0.248	U	ug/L
108-90-7	Chlorobenzene	1	1	0.083	U	0.083	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **M114MW003** | Sample Matrix : **W** | Total/Dissolved: **T**

Location ID: **NA** | Sample Date: **04/24/2014 12:00** | Lab: **GCAL**

Lab Sample ID: **21404241609** | Analysis Date: **05/05/2014 19:43**

Sample Type: **Site Sample**

Method: **EPA 8260B**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
75-00-3	Chloroethane	1	1	0.235	U	0.235	U	ug/L
67-66-3	Chloroform	1	1	0.155	U	0.155	U	ug/L
74-87-3	Chloromethane	1	1	0.144	U	0.144	U	ug/L
156-59-2	cis-1,2-Dichloroethene	1	1	0.103	U	0.103	U	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	1	0.124	U	0.124	U	ug/L
74-95-3	Dibromomethane	1	1	0.211	U	0.211	U	ug/L
75-71-8	Dichlorodifluoromethane	1	1	0.145	U	0.145	U	ug/L
100-41-4	Ethylbenzene	1	1	0.109	U	0.109	U	ug/L
87-68-3	Hexachlorobutadiene	1	1	0.265	U	0.265	U	ug/L
98-82-8	Isopropylbenzene (Cumene)	1	1	0.13	U	0.13	U	ug/L
136777-61-2	m,p-Xylene	1	2	0.123	U	0.123	U	ug/L
75-09-2	Methylene chloride	1	5	0.149	U	0.149	U	ug/L
91-20-3	Naphthalene	1	1	0.176	U	0.176	U	ug/L
104-51-8	n-Butylbenzene	1	1	0.123	U	0.123	U	ug/L
103-65-1	n-Propylbenzene	1	1	0.727	U	0.727	U	ug/L
95-47-6	o-Xylene	1	1	0.055	U	0.055	U	ug/L
135-98-8	sec-Butylbenzene	1	1	0.107	U	0.107	U	ug/L
100-42-5	Styrene	1	1	0.089	U	0.089	U	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	1	5	0.078	U	0.078	U	ug/L
98-06-6	tert-Butylbenzene	1	1	0.087	U	0.087	U	ug/L
127-18-4	Tetrachloroethene	1	1	0.193	U	0.193	U	ug/L
108-88-3	Toluene	1	1	0.122	U	0.122	U	ug/L
156-60-5	trans-1,2-Dichloroethene	1	1	0.077	U	0.077	U	ug/L
10061-02-6	trans-1,3-Dichloropropene	1	1	0.128	U	0.128	U	ug/L
79-01-6	Trichloroethene	1	1	0.161	U	0.161	U	ug/L
75-69-4	Trichlorofluoromethane	1	1	0.157	U	0.157	U	ug/L
75-01-4	Vinyl chloride	1	1	0.127	U	0.127	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **TB-3** | Sample Matrix : **W** | Total/Dissolved: **T**

Location ID: **NA** | Sample Date: **04/24/2014 10:10** | Lab: **GCAL**

Lab Sample ID: **21404241610** | Analysis Date: **05/05/2014 12:35**

Sample Type: **Trip Blank**

Method: **EPA 8260B**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	1	0.12	U	0.12	U	ug/L
71-55-6	1,1,1-Trichloroethane	1	1	0.123	U	0.123	U	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	1	0.109	U	0.109	U	ug/L
79-00-5	1,1,2-Trichloroethane	1	1	0.159	U	0.159	U	ug/L
75-34-3	1,1-Dichloroethane	1	1	0.171	U	0.171	U	ug/L
75-35-4	1,1-Dichloroethene	1	1	0.2	U	0.2	U	ug/L
563-58-6	1,1-Dichloropropene	1	1	0.052	U	0.052	U	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	1	0.079	U	0.079	U	ug/L
96-18-4	1,2,3-Trichloropropane	1	1	0.065	U	0.065	U	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	1	0.105	U	0.105	U	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	1	0.084	U	0.084	U	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	1	1	0.194	U	0.194	U	ug/L
106-93-4	1,2-Dibromoethane	1	1	0.102	U	0.102	U	ug/L
95-50-1	1,2-Dichlorobenzene	1	1	0.135	U	0.135	U	ug/L
107-06-2	1,2-Dichloroethane	1	1	0.116	U	0.116	U	ug/L
78-87-5	1,2-Dichloropropane	1	1	0.15	U	0.15	U	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	1	0.066	U	0.066	U	ug/L
541-73-1	1,3-Dichlorobenzene	1	1	0.138	U	0.138	U	ug/L
142-28-9	1,3-Dichloropropane	1	1	0.059	U	0.059	U	ug/L
106-46-7	1,4-Dichlorobenzene	1	1	0.083	U	0.083	U	ug/L
594-20-7	2,2-Dichloropropane	1	1	0.17	U	0.17	U	ug/L
78-93-3	2-Butanone	1	5	0.142	U	0.142	U	ug/L
95-49-8	2-Chlorotoluene	1	1	0.08	U	0.08	U	ug/L
591-78-6	2-Hexanone	1	5	0.122	U	0.122	U	ug/L
106-43-4	4-Chlorotoluene	1	1	0.124	U	0.124	U	ug/L
99-87-6	4-Isopropyltoluene	1	1	0.07	U	0.07	U	ug/L
108-10-1	4-Methyl-2-pentanone	1	5	0.12	U	0.12	U	ug/L
67-64-1	Acetone	1	5	0.193	U	0.193	U	ug/L
71-43-2	Benzene	1	1	0.111	U	0.111	U	ug/L
108-86-1	Bromobenzene	1	1	0.145	U	0.145	U	ug/L
74-97-5	Bromochloromethane	1	1	0.127	U	0.127	U	ug/L
75-27-4	Bromodichloromethane	1	1	0.083	U	0.083	U	ug/L
75-25-2	Bromoform	1	1	0.215	U	0.215	U	ug/L
74-83-9	Bromomethane	1	1	0.427	U	0.427	U	ug/L
75-15-0	Carbon disulfide	1	1	0.19	U	0.19	U	ug/L
56-23-5	Carbon tetrachloride	1	1	0.248	U	0.248	U	ug/L
108-90-7	Chlorobenzene	1	1	0.083	U	0.083	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **TB-3** | Sample Matrix : **W** | Total/Dissolved: **T**

Location ID: **NA** | Sample Date: **04/24/2014 10:10** | Lab: **GCAL**

Lab Sample ID: **21404241610** | Analysis Date: **05/05/2014 12:35**

Sample Type: **Trip Blank**

Method: **EPA 8260B**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
75-00-3	Chloroethane	1	1	0.235	U	0.235	U	ug/L
67-66-3	Chloroform	1	1	0.155	U	0.155	U	ug/L
74-87-3	Chloromethane	1	1	0.144	U	0.144	U	ug/L
156-59-2	cis-1,2-Dichloroethene	1	1	0.103	U	0.103	U	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	1	0.124	U	0.124	U	ug/L
74-95-3	Dibromomethane	1	1	0.211	U	0.211	U	ug/L
75-71-8	Dichlorodifluoromethane	1	1	0.145	U	0.145	U	ug/L
100-41-4	Ethylbenzene	1	1	0.109	U	0.109	U	ug/L
87-68-3	Hexachlorobutadiene	1	1	0.265	U	0.265	U	ug/L
98-82-8	Isopropylbenzene (Cumene)	1	1	0.13	U	0.13	U	ug/L
136777-61-2	m,p-Xylene	1	2	0.123	U	0.123	U	ug/L
75-09-2	Methylene chloride	1	5	1.24	J	1.24	J	ug/L
91-20-3	Naphthalene	1	1	0.176	U	0.176	U	ug/L
104-51-8	n-Butylbenzene	1	1	0.123	U	0.123	U	ug/L
103-65-1	n-Propylbenzene	1	1	0.727	U	0.727	U	ug/L
95-47-6	o-Xylene	1	1	0.055	U	0.055	U	ug/L
135-98-8	sec-Butylbenzene	1	1	0.107	U	0.107	U	ug/L
100-42-5	Styrene	1	1	0.089	U	0.089	U	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	1	5	0.078	U	0.078	U	ug/L
98-06-6	tert-Butylbenzene	1	1	0.087	U	0.087	U	ug/L
127-18-4	Tetrachloroethene	1	1	0.193	U	0.193	U	ug/L
108-88-3	Toluene	1	1	0.122	U	0.122	U	ug/L
156-60-5	trans-1,2-Dichloroethene	1	1	0.077	U	0.077	U	ug/L
10061-02-6	trans-1,3-Dichloropropene	1	1	0.128	U	0.128	U	ug/L
79-01-6	Trichloroethene	1	1	0.161	U	0.161	U	ug/L
75-69-4	Trichlorofluoromethane	1	1	0.157	U	0.157	U	ug/L
75-01-4	Vinyl chloride	1	1	0.127	U	0.127	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **M114MW002**
Location ID: **NA**
Lab Sample ID: **21404241611**
Sample Type: **Site Sample**
Method: **EPA 8260B**

Sample Matrix : **W**
Sample Date: **04/24/2014 13:08**
Analysis Date: **05/06/2014 17:02**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	1	0.12	U	0.12	U	ug/L
71-55-6	1,1,1-Trichloroethane	1	1	0.123	U	0.123	U	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	1	0.109	U	0.109	U	ug/L
79-00-5	1,1,2-Trichloroethane	1	1	0.159	U	0.159	U	ug/L
75-34-3	1,1-Dichloroethane	1	1	0.171	U	0.171	U	ug/L
75-35-4	1,1-Dichloroethene	1	1	0.2	U	0.2	U	ug/L
563-58-6	1,1-Dichloropropene	1	1	0.052	U	0.052	U	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	1	0.079	U	0.079	U	ug/L
96-18-4	1,2,3-Trichloropropane	1	1	0.065	U	0.065	U	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	1	0.105	U	0.105	U	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	1	0.084	U	0.084	U	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	1	1	0.194	U	0.194	U	ug/L
106-93-4	1,2-Dibromoethane	1	1	0.102	U	0.102	U	ug/L
95-50-1	1,2-Dichlorobenzene	1	1	0.135	U	0.135	U	ug/L
107-06-2	1,2-Dichloroethane	1	1	0.116	U	0.116	U	ug/L
78-87-5	1,2-Dichloropropane	1	1	0.15	U	0.15	U	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	1	0.066	U	0.066	U	ug/L
541-73-1	1,3-Dichlorobenzene	1	1	0.138	U	0.138	U	ug/L
142-28-9	1,3-Dichloropropane	1	1	0.059	U	0.059	U	ug/L
106-46-7	1,4-Dichlorobenzene	1	1	0.083	U	0.083	U	ug/L
594-20-7	2,2-Dichloropropane	1	1	0.17	U	0.17	U	ug/L
78-93-3	2-Butanone	1	5	0.142	U	0.142	U	ug/L
95-49-8	2-Chlorotoluene	1	1	0.08	U	0.08	U	ug/L
591-78-6	2-Hexanone	1	5	0.122	U	0.122	U	ug/L
106-43-4	4-Chlorotoluene	1	1	0.124	U	0.124	U	ug/L
99-87-6	4-Isopropyltoluene	1	1	0.07	U	0.07	U	ug/L
108-10-1	4-Methyl-2-pentanone	1	5	0.12	U	0.12	U	ug/L
67-64-1	Acetone	1	5	0.193	U	0.193	U	ug/L
71-43-2	Benzene	1	1	0.111	U	0.111	U	ug/L
108-86-1	Bromobenzene	1	1	0.145	U	0.145	U	ug/L
74-97-5	Bromochloromethane	1	1	0.127	U	0.127	U	ug/L
75-27-4	Bromodichloromethane	1	1	0.083	U	0.083	U	ug/L
75-25-2	Bromoform	1	1	0.215	U	0.215	U	ug/L
74-83-9	Bromomethane	1	1	0.427	U	0.427	U	ug/L
75-15-0	Carbon disulfide	1	1	0.19	U	0.19	U	ug/L
56-23-5	Carbon tetrachloride	1	1	0.248	U	0.248	U	ug/L
108-90-7	Chlorobenzene	1	1	0.083	U	0.083	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **M114MW002** | Sample Matrix : **W** | Total/Dissolved: **T**

Location ID: **NA** | Sample Date: **04/24/2014 13:08** | Lab: **GCAL**

Lab Sample ID: **21404241611** | Analysis Date: **05/06/2014 17:02**

Sample Type: **Site Sample**

Method: **EPA 8260B**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
75-00-3	Chloroethane	1	1	0.235	U	0.235	U	ug/L
67-66-3	Chloroform	1	1	0.155	U	0.155	U	ug/L
74-87-3	Chloromethane	1	1	0.144	U	0.144	U	ug/L
156-59-2	cis-1,2-Dichloroethene	1	1	0.103	U	0.103	U	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	1	0.124	U	0.124	U	ug/L
74-95-3	Dibromomethane	1	1	0.211	U	0.211	U	ug/L
75-71-8	Dichlorodifluoromethane	1	1	0.145	U	0.145	U	ug/L
100-41-4	Ethylbenzene	1	1	0.109	U	0.109	U	ug/L
87-68-3	Hexachlorobutadiene	1	1	0.265	U	0.265	U	ug/L
98-82-8	Isopropylbenzene (Cumene)	1	1	0.13	U	0.13	U	ug/L
136777-61-2	m,p-Xylene	1	2	0.123	U	0.123	U	ug/L
75-09-2	Methylene chloride	1	5	0.149	U	0.149	U	ug/L
91-20-3	Naphthalene	1	1	0.176	U	0.176	U	ug/L
104-51-8	n-Butylbenzene	1	1	0.123	U	0.123	U	ug/L
103-65-1	n-Propylbenzene	1	1	0.727	U	0.727	U	ug/L
95-47-6	o-Xylene	1	1	0.055	U	0.055	U	ug/L
135-98-8	sec-Butylbenzene	1	1	0.107	U	0.107	U	ug/L
100-42-5	Styrene	1	1	0.089	U	0.089	U	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	1	5	0.078	U	0.078	U	ug/L
98-06-6	tert-Butylbenzene	1	1	0.087	U	0.087	U	ug/L
127-18-4	Tetrachloroethene	1	1	0.193	U	0.193	U	ug/L
108-88-3	Toluene	1	1	0.122	U	0.122	U	ug/L
156-60-5	trans-1,2-Dichloroethene	1	1	0.077	U	0.077	U	ug/L
10061-02-6	trans-1,3-Dichloropropene	1	1	0.128	U	0.128	U	ug/L
79-01-6	Trichloroethene	1	1	0.161	U	0.161	U	ug/L
75-69-4	Trichlorofluoromethane	1	1	0.157	U	0.157	U	ug/L
75-01-4	Vinyl chloride	1	1	0.127	U	0.127	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **M114MW001** | Sample Matrix : **W** | Total/Dissolved: **T**

Location ID: **NA** | Sample Date: **04/24/2014 14:30** | Lab: **GCAL**

Lab Sample ID: **21404241612** | Analysis Date: **05/06/2014 17:23**

Sample Type: **Site Sample**

Method: **EPA 8260B**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	1	0.12	U	0.12	U	ug/L
71-55-6	1,1,1-Trichloroethane	1	1	0.123	U	0.123	U	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	1	0.109	U	0.109	U	ug/L
79-00-5	1,1,2-Trichloroethane	1	1	0.159	U	0.159	U	ug/L
75-34-3	1,1-Dichloroethane	1	1	0.171	U	0.171	U	ug/L
75-35-4	1,1-Dichloroethene	1	1	0.2	U	0.2	U	ug/L
563-58-6	1,1-Dichloropropene	1	1	0.052	U	0.052	U	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	1	0.079	U	0.079	U	ug/L
96-18-4	1,2,3-Trichloropropane	1	1	0.065	U	0.065	U	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	1	0.105	U	0.105	U	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	1	0.084	U	0.084	U	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	1	1	0.194	U	0.194	U	ug/L
106-93-4	1,2-Dibromoethane	1	1	0.102	U	0.102	U	ug/L
95-50-1	1,2-Dichlorobenzene	1	1	0.135	U	0.135	U	ug/L
107-06-2	1,2-Dichloroethane	1	1	0.116	U	0.116	U	ug/L
78-87-5	1,2-Dichloropropane	1	1	0.15	U	0.15	U	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	1	0.066	U	0.066	U	ug/L
541-73-1	1,3-Dichlorobenzene	1	1	0.138	U	0.138	U	ug/L
142-28-9	1,3-Dichloropropane	1	1	0.059	U	0.059	U	ug/L
106-46-7	1,4-Dichlorobenzene	1	1	0.083	U	0.083	U	ug/L
594-20-7	2,2-Dichloropropane	1	1	0.17	U	0.17	U	ug/L
78-93-3	2-Butanone	1	5	0.142	U	0.142	U	ug/L
95-49-8	2-Chlorotoluene	1	1	0.08	U	0.08	U	ug/L
591-78-6	2-Hexanone	1	5	0.122	U	0.122	U	ug/L
106-43-4	4-Chlorotoluene	1	1	0.124	U	0.124	U	ug/L
99-87-6	4-Isopropyltoluene	1	1	0.07	U	0.07	U	ug/L
108-10-1	4-Methyl-2-pentanone	1	5	0.12	U	0.12	U	ug/L
67-64-1	Acetone	1	5	0.193	U	0.193	U	ug/L
71-43-2	Benzene	1	1	0.111	U	0.111	U	ug/L
108-86-1	Bromobenzene	1	1	0.145	U	0.145	U	ug/L
74-97-5	Bromochloromethane	1	1	0.127	U	0.127	U	ug/L
75-27-4	Bromodichloromethane	1	1	0.083	U	0.083	U	ug/L
75-25-2	Bromoform	1	1	0.215	U	0.215	U	ug/L
74-83-9	Bromomethane	1	1	0.427	U	0.427	U	ug/L
75-15-0	Carbon disulfide	1	1	0.19	U	0.19	U	ug/L
56-23-5	Carbon tetrachloride	1	1	0.248	U	0.248	U	ug/L
108-90-7	Chlorobenzene	1	1	0.083	U	0.083	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **M114MW001** | Sample Matrix : **W** | Total/Dissolved: **T**

Location ID: **NA** | Sample Date: **04/24/2014 14:30** | Lab: **GCAL**

Lab Sample ID: **21404241612** | Analysis Date: **05/06/2014 17:23**

Sample Type: **Site Sample**

Method: **EPA 8260B**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
75-00-3	Chloroethane	1	1	0.235	U	0.235	U	ug/L
67-66-3	Chloroform	1	1	0.155	U	0.155	U	ug/L
74-87-3	Chloromethane	1	1	0.144	U	0.144	U	ug/L
156-59-2	cis-1,2-Dichloroethene	1	1	0.103	U	0.103	U	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	1	0.124	U	0.124	U	ug/L
74-95-3	Dibromomethane	1	1	0.211	U	0.211	U	ug/L
75-71-8	Dichlorodifluoromethane	1	1	0.145	U	0.145	U	ug/L
100-41-4	Ethylbenzene	1	1	0.109	U	0.109	U	ug/L
87-68-3	Hexachlorobutadiene	1	1	0.265	U	0.265	U	ug/L
98-82-8	Isopropylbenzene (Cumene)	1	1	0.13	U	0.13	U	ug/L
136777-61-2	m,p-Xylene	1	2	0.123	U	0.123	U	ug/L
75-09-2	Methylene chloride	1	5	0.149	U	0.149	U	ug/L
91-20-3	Naphthalene	1	1	0.176	U	0.176	U	ug/L
104-51-8	n-Butylbenzene	1	1	0.123	U	0.123	U	ug/L
103-65-1	n-Propylbenzene	1	1	0.727	U	0.727	U	ug/L
95-47-6	o-Xylene	1	1	0.055	U	0.055	U	ug/L
135-98-8	sec-Butylbenzene	1	1	0.107	U	0.107	U	ug/L
100-42-5	Styrene	1	1	0.089	U	0.089	U	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	1	5	0.078	U	0.078	U	ug/L
98-06-6	tert-Butylbenzene	1	1	0.087	U	0.087	U	ug/L
127-18-4	Tetrachloroethene	1	1	0.193	U	0.193	U	ug/L
108-88-3	Toluene	1	1	0.122	U	0.122	U	ug/L
156-60-5	trans-1,2-Dichloroethene	1	1	0.077	U	0.077	U	ug/L
10061-02-6	trans-1,3-Dichloropropene	1	1	0.128	U	0.128	U	ug/L
79-01-6	Trichloroethene	1	1	0.161	U	0.161	U	ug/L
75-69-4	Trichlorofluoromethane	1	1	0.157	U	0.157	U	ug/L
75-01-4	Vinyl chloride	1	1	0.127	U	0.127	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **TB-4**
Location ID: **NA**
Lab Sample ID: **21404241613**
Sample Type: **Trip Blank**
Method: **EPA 8260B**

Sample Matrix : **W**
Sample Date: **04/24/2014 13:08**
Analysis Date: **05/05/2014 12:59**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	1	0.12	U	0.12	U	ug/L
71-55-6	1,1,1-Trichloroethane	1	1	0.123	U	0.123	U	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	1	0.109	U	0.109	U	ug/L
79-00-5	1,1,2-Trichloroethane	1	1	0.159	U	0.159	U	ug/L
75-34-3	1,1-Dichloroethane	1	1	0.171	U	0.171	U	ug/L
75-35-4	1,1-Dichloroethene	1	1	0.2	U	0.2	U	ug/L
563-58-6	1,1-Dichloropropene	1	1	0.052	U	0.052	U	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	1	0.079	U	0.079	U	ug/L
96-18-4	1,2,3-Trichloropropane	1	1	0.065	U	0.065	U	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	1	0.105	U	0.105	U	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	1	0.084	U	0.084	U	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	1	1	0.194	U	0.194	U	ug/L
106-93-4	1,2-Dibromoethane	1	1	0.102	U	0.102	U	ug/L
95-50-1	1,2-Dichlorobenzene	1	1	0.135	U	0.135	U	ug/L
107-06-2	1,2-Dichloroethane	1	1	0.116	U	0.116	U	ug/L
78-87-5	1,2-Dichloropropane	1	1	0.15	U	0.15	U	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	1	0.066	U	0.066	U	ug/L
541-73-1	1,3-Dichlorobenzene	1	1	0.138	U	0.138	U	ug/L
142-28-9	1,3-Dichloropropane	1	1	0.059	U	0.059	U	ug/L
106-46-7	1,4-Dichlorobenzene	1	1	0.083	U	0.083	U	ug/L
594-20-7	2,2-Dichloropropane	1	1	0.17	U	0.17	U	ug/L
78-93-3	2-Butanone	1	5	0.142	U	0.142	U	ug/L
95-49-8	2-Chlorotoluene	1	1	0.08	U	0.08	U	ug/L
591-78-6	2-Hexanone	1	5	0.122	U	0.122	U	ug/L
106-43-4	4-Chlorotoluene	1	1	0.124	U	0.124	U	ug/L
99-87-6	4-Isopropyltoluene	1	1	0.07	U	0.07	U	ug/L
108-10-1	4-Methyl-2-pentanone	1	5	0.12	U	0.12	U	ug/L
67-64-1	Acetone	1	5	0.193	U	0.193	U	ug/L
71-43-2	Benzene	1	1	0.111	U	0.111	U	ug/L
108-86-1	Bromobenzene	1	1	0.145	U	0.145	U	ug/L
74-97-5	Bromochloromethane	1	1	0.127	U	0.127	U	ug/L
75-27-4	Bromodichloromethane	1	1	0.083	U	0.083	U	ug/L
75-25-2	Bromoform	1	1	0.215	U	0.215	U	ug/L
74-83-9	Bromomethane	1	1	0.427	U	0.427	U	ug/L
75-15-0	Carbon disulfide	1	1	0.19	U	0.19	U	ug/L
56-23-5	Carbon tetrachloride	1	1	0.248	U	0.248	U	ug/L
108-90-7	Chlorobenzene	1	1	0.083	U	0.083	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **TB-4**
Location ID: **NA**
Lab Sample ID: **21404241613**
Sample Type: **Trip Blank**
Method: **EPA 8260B**

Sample Matrix : **W**
Sample Date: **04/24/2014 13:08**
Analysis Date: **05/05/2014 12:59**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
75-00-3	Chloroethane	1	1	0.235	U	0.235	U	ug/L
67-66-3	Chloroform	1	1	0.155	U	0.155	U	ug/L
74-87-3	Chloromethane	1	1	0.144	U	0.144	U	ug/L
156-59-2	cis-1,2-Dichloroethene	1	1	0.103	U	0.103	U	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	1	0.124	U	0.124	U	ug/L
74-95-3	Dibromomethane	1	1	0.211	U	0.211	U	ug/L
75-71-8	Dichlorodifluoromethane	1	1	0.145	U	0.145	U	ug/L
100-41-4	Ethylbenzene	1	1	0.109	U	0.109	U	ug/L
87-68-3	Hexachlorobutadiene	1	1	0.265	U	0.265	U	ug/L
98-82-8	Isopropylbenzene (Cumene)	1	1	0.13	U	0.13	U	ug/L
136777-61-2	m,p-Xylene	1	2	0.123	U	0.123	U	ug/L
75-09-2	Methylene chloride	1	5	1.24	J	1.24	J	ug/L
91-20-3	Naphthalene	1	1	0.176	U	0.176	U	ug/L
104-51-8	n-Butylbenzene	1	1	0.123	U	0.123	U	ug/L
103-65-1	n-Propylbenzene	1	1	0.727	U	0.727	U	ug/L
95-47-6	o-Xylene	1	1	0.055	U	0.055	U	ug/L
135-98-8	sec-Butylbenzene	1	1	0.107	U	0.107	U	ug/L
100-42-5	Styrene	1	1	0.089	U	0.089	U	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	1	5	0.078	U	0.078	U	ug/L
98-06-6	tert-Butylbenzene	1	1	0.087	U	0.087	U	ug/L
127-18-4	Tetrachloroethene	1	1	0.193	U	0.193	U	ug/L
108-88-3	Toluene	1	1	0.122	U	0.122	U	ug/L
156-60-5	trans-1,2-Dichloroethene	1	1	0.077	U	0.077	U	ug/L
10061-02-6	trans-1,3-Dichloropropene	1	1	0.128	U	0.128	U	ug/L
79-01-6	Trichloroethene	1	1	0.161	U	0.161	U	ug/L
75-69-4	Trichlorofluoromethane	1	1	0.157	U	0.157	U	ug/L
75-01-4	Vinyl chloride	1	1	0.127	U	0.127	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **M114MW004**
Location ID: **NA**
Lab Sample ID: **21404241614**
Sample Type: **Site Sample**
Method: **EPA 8260B**

Sample Matrix : **W**
Sample Date: **04/25/2014 9:25**
Analysis Date: **05/06/2014 17:43**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	1	0.12	U	0.12	U	ug/L
71-55-6	1,1,1-Trichloroethane	1	1	0.123	U	0.123	U	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	1	0.109	U	0.109	U	ug/L
79-00-5	1,1,2-Trichloroethane	1	1	0.159	U	0.159	U	ug/L
75-34-3	1,1-Dichloroethane	1	1	0.171	U	0.171	U	ug/L
75-35-4	1,1-Dichloroethene	1	1	0.2	U	0.2	U	ug/L
563-58-6	1,1-Dichloropropene	1	1	0.052	U	0.052	U	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	1	0.079	U	0.079	U	ug/L
96-18-4	1,2,3-Trichloropropane	1	1	0.065	U	0.065	U	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	1	0.105	U	0.105	U	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	1	0.084	U	0.084	U	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	1	1	0.194	U	0.194	U	ug/L
106-93-4	1,2-Dibromoethane	1	1	0.102	U	0.102	U	ug/L
95-50-1	1,2-Dichlorobenzene	1	1	0.135	U	0.135	U	ug/L
107-06-2	1,2-Dichloroethane	1	1	0.116	U	0.116	U	ug/L
78-87-5	1,2-Dichloropropane	1	1	0.15	U	0.15	U	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	1	0.066	U	0.066	U	ug/L
541-73-1	1,3-Dichlorobenzene	1	1	0.138	U	0.138	U	ug/L
142-28-9	1,3-Dichloropropane	1	1	0.059	U	0.059	U	ug/L
106-46-7	1,4-Dichlorobenzene	1	1	0.083	U	0.083	U	ug/L
594-20-7	2,2-Dichloropropane	1	1	0.17	U	0.17	U	ug/L
78-93-3	2-Butanone	1	5	0.142	U	0.142	U	ug/L
95-49-8	2-Chlorotoluene	1	1	0.08	U	0.08	U	ug/L
591-78-6	2-Hexanone	1	5	0.122	U	0.122	U	ug/L
106-43-4	4-Chlorotoluene	1	1	0.124	U	0.124	U	ug/L
99-87-6	4-Isopropyltoluene	1	1	0.07	U	0.07	U	ug/L
108-10-1	4-Methyl-2-pentanone	1	5	0.12	U	0.12	U	ug/L
67-64-1	Acetone	1	5	0.193	U	0.193	U	ug/L
71-43-2	Benzene	1	1	0.111	U	0.111	U	ug/L
108-86-1	Bromobenzene	1	1	0.145	U	0.145	U	ug/L
74-97-5	Bromochloromethane	1	1	0.127	U	0.127	U	ug/L
75-27-4	Bromodichloromethane	1	1	0.083	U	0.083	U	ug/L
75-25-2	Bromoform	1	1	0.215	U	0.215	U	ug/L
74-83-9	Bromomethane	1	1	0.427	U	0.427	U	ug/L
75-15-0	Carbon disulfide	1	1	0.19	U	0.19	U	ug/L
56-23-5	Carbon tetrachloride	1	1	0.248	U	0.248	U	ug/L
108-90-7	Chlorobenzene	1	1	0.083	U	0.083	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **M114MW004** | Sample Matrix : **W** | Total/Dissolved: **T**

Location ID: **NA** | Sample Date: **04/25/2014 9:25** | Lab: **GCAL**

Lab Sample ID: **21404241614** | Analysis Date: **05/06/2014 17:43**

Sample Type: **Site Sample**

Method: **EPA 8260B**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
75-00-3	Chloroethane	1	1	0.235	U	0.235	U	ug/L
67-66-3	Chloroform	1	1	0.155	U	0.155	U	ug/L
74-87-3	Chloromethane	1	1	0.144	U	0.144	U	ug/L
156-59-2	cis-1,2-Dichloroethene	1	1	0.103	U	0.103	U	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	1	0.124	U	0.124	U	ug/L
74-95-3	Dibromomethane	1	1	0.211	U	0.211	U	ug/L
75-71-8	Dichlorodifluoromethane	1	1	0.145	U	0.145	U	ug/L
100-41-4	Ethylbenzene	1	1	0.109	U	0.109	U	ug/L
87-68-3	Hexachlorobutadiene	1	1	0.265	U	0.265	U	ug/L
98-82-8	Isopropylbenzene (Cumene)	1	1	0.13	U	0.13	U	ug/L
136777-61-2	m,p-Xylene	1	2	0.123	U	0.123	U	ug/L
75-09-2	Methylene chloride	1	5	0.149	U	0.149	U	ug/L
91-20-3	Naphthalene	1	1	0.176	U	0.176	U	ug/L
104-51-8	n-Butylbenzene	1	1	0.123	U	0.123	U	ug/L
103-65-1	n-Propylbenzene	1	1	0.727	U	0.727	U	ug/L
95-47-6	o-Xylene	1	1	0.055	U	0.055	U	ug/L
135-98-8	sec-Butylbenzene	1	1	0.107	U	0.107	U	ug/L
100-42-5	Styrene	1	1	0.089	U	0.089	U	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	1	5	0.078	U	0.078	U	ug/L
98-06-6	tert-Butylbenzene	1	1	0.087	U	0.087	U	ug/L
127-18-4	Tetrachloroethene	1	1	0.193	U	0.193	U	ug/L
108-88-3	Toluene	1	1	0.122	U	0.122	U	ug/L
156-60-5	trans-1,2-Dichloroethene	1	1	0.077	U	0.077	U	ug/L
10061-02-6	trans-1,3-Dichloropropene	1	1	0.128	U	0.128	U	ug/L
79-01-6	Trichloroethene	1	1	0.161	U	0.161	U	ug/L
75-69-4	Trichlorofluoromethane	1	1	0.157	U	0.157	U	ug/L
75-01-4	Vinyl chloride	1	1	0.127	U	0.127	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MWQ-24**
Location ID: **NA**
Lab Sample ID: **21404241615**
Sample Type: **Site Sample**
Method: **EPA 8260B**

Sample Matrix : **W**
Sample Date: **04/25/2014 11:00**
Analysis Date: **05/06/2014 18:04**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	1	0.12	U	0.12	U	ug/L
71-55-6	1,1,1-Trichloroethane	1	1	0.123	U	0.123	U	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	1	0.109	U	0.109	U	ug/L
79-00-5	1,1,2-Trichloroethane	1	1	0.159	U	0.159	U	ug/L
75-34-3	1,1-Dichloroethane	1	1	0.171	U	0.171	U	ug/L
75-35-4	1,1-Dichloroethene	1	1	0.2	U	0.2	U	ug/L
563-58-6	1,1-Dichloropropene	1	1	0.052	U	0.052	U	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	1	0.079	U	0.079	U	ug/L
96-18-4	1,2,3-Trichloropropane	1	1	0.065	U	0.065	U	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	1	0.105	U	0.105	U	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	1	0.084	U	0.084	U	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	1	1	0.194	U	0.194	U	ug/L
106-93-4	1,2-Dibromoethane	1	1	0.102	U	0.102	U	ug/L
95-50-1	1,2-Dichlorobenzene	1	1	0.135	U	0.135	U	ug/L
107-06-2	1,2-Dichloroethane	1	1	0.116	U	0.116	U	ug/L
78-87-5	1,2-Dichloropropane	1	1	0.15	U	0.15	U	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	1	0.066	U	0.066	U	ug/L
541-73-1	1,3-Dichlorobenzene	1	1	0.138	U	0.138	U	ug/L
142-28-9	1,3-Dichloropropane	1	1	0.059	U	0.059	U	ug/L
106-46-7	1,4-Dichlorobenzene	1	1	0.083	U	0.083	U	ug/L
594-20-7	2,2-Dichloropropane	1	1	0.17	U	0.17	U	ug/L
78-93-3	2-Butanone	1	5	0.142	U	0.142	U	ug/L
95-49-8	2-Chlorotoluene	1	1	0.08	U	0.08	U	ug/L
591-78-6	2-Hexanone	1	5	0.122	U	0.122	U	ug/L
106-43-4	4-Chlorotoluene	1	1	0.124	U	0.124	U	ug/L
99-87-6	4-Isopropyltoluene	1	1	0.07	U	0.07	U	ug/L
108-10-1	4-Methyl-2-pentanone	1	5	0.12	U	0.12	U	ug/L
67-64-1	Acetone	1	5	0.193	U	0.193	U	ug/L
71-43-2	Benzene	1	1	0.111	U	0.111	U	ug/L
108-86-1	Bromobenzene	1	1	0.145	U	0.145	U	ug/L
74-97-5	Bromochloromethane	1	1	0.127	U	0.127	U	ug/L
75-27-4	Bromodichloromethane	1	1	0.083	U	0.083	U	ug/L
75-25-2	Bromoform	1	1	0.215	U	0.215	U	ug/L
74-83-9	Bromomethane	1	1	0.427	U	0.427	U	ug/L
75-15-0	Carbon disulfide	1	1	0.19	U	0.19	U	ug/L
56-23-5	Carbon tetrachloride	1	1	0.248	U	0.248	U	ug/L
108-90-7	Chlorobenzene	1	1	0.083	U	0.083	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MWQ-24**
Location ID: **NA**
Lab Sample ID: **21404241615**
Sample Type: **Site Sample**
Method: **EPA 8260B**

Sample Matrix : **W**
Sample Date: **04/25/2014 11:00**
Analysis Date: **05/06/2014 18:04**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
75-00-3	Chloroethane	1	1	0.235	U	0.235	U	ug/L
67-66-3	Chloroform	1	1	0.155	U	0.155	U	ug/L
74-87-3	Chloromethane	1	1	0.144	U	0.144	U	ug/L
156-59-2	cis-1,2-Dichloroethene	1	1	0.103	U	0.103	U	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	1	0.124	U	0.124	U	ug/L
74-95-3	Dibromomethane	1	1	0.211	U	0.211	U	ug/L
75-71-8	Dichlorodifluoromethane	1	1	0.145	U	0.145	U	ug/L
100-41-4	Ethylbenzene	1	1	0.109	U	0.109	U	ug/L
87-68-3	Hexachlorobutadiene	1	1	0.265	U	0.265	U	ug/L
98-82-8	Isopropylbenzene (Cumene)	1	1	0.13	U	0.13	U	ug/L
136777-61-2	m,p-Xylene	1	2	0.123	U	0.123	U	ug/L
75-09-2	Methylene chloride	1	5	0.149	U	0.149	U	ug/L
91-20-3	Naphthalene	1	1	0.176	U	0.176	U	ug/L
104-51-8	n-Butylbenzene	1	1	0.123	U	0.123	U	ug/L
103-65-1	n-Propylbenzene	1	1	0.727	U	0.727	U	ug/L
95-47-6	o-Xylene	1	1	0.055	U	0.055	U	ug/L
135-98-8	sec-Butylbenzene	1	1	0.107	U	0.107	U	ug/L
100-42-5	Styrene	1	1	0.089	U	0.089	U	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	1	5	0.078	U	0.078	U	ug/L
98-06-6	tert-Butylbenzene	1	1	0.087	U	0.087	U	ug/L
127-18-4	Tetrachloroethene	1	1	0.193	U	0.193	U	ug/L
108-88-3	Toluene	1	1	0.122	U	0.122	U	ug/L
156-60-5	trans-1,2-Dichloroethene	1	1	0.077	U	0.077	U	ug/L
10061-02-6	trans-1,3-Dichloropropene	1	1	0.128	U	0.128	U	ug/L
79-01-6	Trichloroethene	1	1	0.161	U	0.161	U	ug/L
75-69-4	Trichlorofluoromethane	1	1	0.157	U	0.157	U	ug/L
75-01-4	Vinyl chloride	1	1	0.127	U	0.127	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **TB-6**
Location ID: **NA**
Lab Sample ID: **21404241616**
Sample Type: **Trip Blank**
Method: **EPA 8260B**

Sample Matrix : **W**
Sample Date: **04/25/2014 9:25**
Analysis Date: **05/06/2014 18:25**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	1	0.12	U	0.12	U	ug/L
71-55-6	1,1,1-Trichloroethane	1	1	0.123	U	0.123	U	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	1	0.109	U	0.109	U	ug/L
79-00-5	1,1,2-Trichloroethane	1	1	0.159	U	0.159	U	ug/L
75-34-3	1,1-Dichloroethane	1	1	0.171	U	0.171	U	ug/L
75-35-4	1,1-Dichloroethene	1	1	0.2	U	0.2	U	ug/L
563-58-6	1,1-Dichloropropene	1	1	0.052	U	0.052	U	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	1	0.079	U	0.079	U	ug/L
96-18-4	1,2,3-Trichloropropane	1	1	0.065	U	0.065	U	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	1	0.105	U	0.105	U	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	1	0.084	U	0.084	U	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	1	1	0.194	U	0.194	U	ug/L
106-93-4	1,2-Dibromoethane	1	1	0.102	U	0.102	U	ug/L
95-50-1	1,2-Dichlorobenzene	1	1	0.135	U	0.135	U	ug/L
107-06-2	1,2-Dichloroethane	1	1	0.116	U	0.116	U	ug/L
78-87-5	1,2-Dichloropropane	1	1	0.15	U	0.15	U	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	1	0.066	U	0.066	U	ug/L
541-73-1	1,3-Dichlorobenzene	1	1	0.138	U	0.138	U	ug/L
142-28-9	1,3-Dichloropropane	1	1	0.059	U	0.059	U	ug/L
106-46-7	1,4-Dichlorobenzene	1	1	0.083	U	0.083	U	ug/L
594-20-7	2,2-Dichloropropane	1	1	0.17	U	0.17	U	ug/L
78-93-3	2-Butanone	1	5	0.142	U	0.142	U	ug/L
95-49-8	2-Chlorotoluene	1	1	0.08	U	0.08	U	ug/L
591-78-6	2-Hexanone	1	5	0.122	U	0.122	U	ug/L
106-43-4	4-Chlorotoluene	1	1	0.124	U	0.124	U	ug/L
99-87-6	4-Isopropyltoluene	1	1	0.07	U	0.07	U	ug/L
108-10-1	4-Methyl-2-pentanone	1	5	0.12	U	0.12	U	ug/L
67-64-1	Acetone	1	5	0.193	U	0.193	U	ug/L
71-43-2	Benzene	1	1	0.111	U	0.111	U	ug/L
108-86-1	Bromobenzene	1	1	0.145	U	0.145	U	ug/L
74-97-5	Bromochloromethane	1	1	0.127	U	0.127	U	ug/L
75-27-4	Bromodichloromethane	1	1	0.083	U	0.083	U	ug/L
75-25-2	Bromoform	1	1	0.215	U	0.215	U	ug/L
74-83-9	Bromomethane	1	1	0.427	U	0.427	U	ug/L
75-15-0	Carbon disulfide	1	1	0.19	U	0.19	U	ug/L
56-23-5	Carbon tetrachloride	1	1	0.248	U	0.248	U	ug/L
108-90-7	Chlorobenzene	1	1	0.083	U	0.083	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **TB-6**
Location ID: **NA**
Lab Sample ID: **21404241616**
Sample Type: **Trip Blank**
Method: **EPA 8260B**

Sample Matrix : **W**
Sample Date: **04/25/2014 9:25**
Analysis Date: **05/06/2014 18:25**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
75-00-3	Chloroethane	1	1	0.235	U	0.235	U	ug/L
67-66-3	Chloroform	1	1	0.155	U	0.155	U	ug/L
74-87-3	Chloromethane	1	1	0.144	U	0.144	U	ug/L
156-59-2	cis-1,2-Dichloroethene	1	1	0.103	U	0.103	U	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	1	0.124	U	0.124	U	ug/L
74-95-3	Dibromomethane	1	1	0.211	U	0.211	U	ug/L
75-71-8	Dichlorodifluoromethane	1	1	0.145	U	0.145	U	ug/L
100-41-4	Ethylbenzene	1	1	0.109	U	0.109	U	ug/L
87-68-3	Hexachlorobutadiene	1	1	0.265	U	0.265	U	ug/L
98-82-8	Isopropylbenzene (Cumene)	1	1	0.13	U	0.13	U	ug/L
136777-61-2	m,p-Xylene	1	2	0.123	U	0.123	U	ug/L
75-09-2	Methylene chloride	1	5	1.38	J	1.38	J	ug/L
91-20-3	Naphthalene	1	1	0.176	U	0.176	U	ug/L
104-51-8	n-Butylbenzene	1	1	0.123	U	0.123	U	ug/L
103-65-1	n-Propylbenzene	1	1	0.727	U	0.727	U	ug/L
95-47-6	o-Xylene	1	1	0.055	U	0.055	U	ug/L
135-98-8	sec-Butylbenzene	1	1	0.107	U	0.107	U	ug/L
100-42-5	Styrene	1	1	0.089	U	0.089	U	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	1	5	0.078	U	0.078	U	ug/L
98-06-6	tert-Butylbenzene	1	1	0.087	U	0.087	U	ug/L
127-18-4	Tetrachloroethene	1	1	0.193	U	0.193	U	ug/L
108-88-3	Toluene	1	1	0.122	U	0.122	U	ug/L
156-60-5	trans-1,2-Dichloroethene	1	1	0.077	U	0.077	U	ug/L
10061-02-6	trans-1,3-Dichloropropene	1	1	0.128	U	0.128	U	ug/L
79-01-6	Trichloroethene	1	1	0.161	U	0.161	U	ug/L
75-69-4	Trichlorofluoromethane	1	1	0.157	U	0.157	U	ug/L
75-01-4	Vinyl chloride	1	1	0.127	U	0.127	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA02MW001D** | Sample Matrix : **W** | Total/Dissolved: **T**

Location ID: **NA** | Sample Date: **04/25/2014 12:52** | Lab: **GCAL**

Lab Sample ID: **21404241617** | Analysis Date: **05/06/2014 18:45**

Sample Type: **Site Sample**

Method: **EPA 8260B**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	1	0.12	U	0.12	U	ug/L
71-55-6	1,1,1-Trichloroethane	1	1	0.123	U	0.123	U	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	1	0.109	U	0.109	U	ug/L
79-00-5	1,1,2-Trichloroethane	1	1	0.159	U	0.159	U	ug/L
75-34-3	1,1-Dichloroethane	1	1	0.171	U	0.171	U	ug/L
75-35-4	1,1-Dichloroethene	1	1	0.2	U	0.2	U	ug/L
563-58-6	1,1-Dichloropropene	1	1	0.052	U	0.052	U	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	1	0.079	U	0.079	U	ug/L
96-18-4	1,2,3-Trichloropropane	1	1	0.065	U	0.065	U	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	1	0.105	U	0.105	U	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	1	0.084	U	0.084	U	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	1	1	0.194	U	0.194	U	ug/L
106-93-4	1,2-Dibromoethane	1	1	0.102	U	0.102	U	ug/L
95-50-1	1,2-Dichlorobenzene	1	1	0.135	U	0.135	U	ug/L
107-06-2	1,2-Dichloroethane	1	1	0.116	U	0.116	U	ug/L
78-87-5	1,2-Dichloropropane	1	1	0.15	U	0.15	U	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	1	0.066	U	0.066	U	ug/L
541-73-1	1,3-Dichlorobenzene	1	1	0.138	U	0.138	U	ug/L
142-28-9	1,3-Dichloropropane	1	1	0.059	U	0.059	U	ug/L
106-46-7	1,4-Dichlorobenzene	1	1	0.083	U	0.083	U	ug/L
594-20-7	2,2-Dichloropropane	1	1	0.17	U	0.17	U	ug/L
78-93-3	2-Butanone	1	5	0.142	U	0.142	U	ug/L
95-49-8	2-Chlorotoluene	1	1	0.08	U	0.08	U	ug/L
591-78-6	2-Hexanone	1	5	0.122	U	0.122	U	ug/L
106-43-4	4-Chlorotoluene	1	1	0.124	U	0.124	U	ug/L
99-87-6	4-Isopropyltoluene	1	1	0.07	U	0.07	U	ug/L
108-10-1	4-Methyl-2-pentanone	1	5	0.12	U	0.12	U	ug/L
67-64-1	Acetone	1	5	0.193	U	0.193	U	ug/L
71-43-2	Benzene	1	1	0.111	U	0.111	U	ug/L
108-86-1	Bromobenzene	1	1	0.145	U	0.145	U	ug/L
74-97-5	Bromochloromethane	1	1	0.127	U	0.127	U	ug/L
75-27-4	Bromodichloromethane	1	1	0.083	U	0.083	U	ug/L
75-25-2	Bromoform	1	1	0.215	U	0.215	U	ug/L
74-83-9	Bromomethane	1	1	0.427	U	0.427	U	ug/L
75-15-0	Carbon disulfide	1	1	0.19	U	0.19	U	ug/L
56-23-5	Carbon tetrachloride	1	1	0.248	U	0.248	U	ug/L
108-90-7	Chlorobenzene	1	1	0.083	U	0.083	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA02MW001D**
Location ID: **NA**
Lab Sample ID: **21404241617**
Sample Type: **Site Sample**
Method: **EPA 8260B**

Sample Matrix : **W**
Sample Date: **04/25/2014 12:52**
Analysis Date: **05/06/2014 18:45**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
75-00-3	Chloroethane	1	1	0.235	U	0.235	U	ug/L
67-66-3	Chloroform	1	1	0.155	U	0.155	U	ug/L
74-87-3	Chloromethane	1	1	0.144	U	0.144	U	ug/L
156-59-2	cis-1,2-Dichloroethene	1	1	0.103	U	0.103	U	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	1	0.124	U	0.124	U	ug/L
74-95-3	Dibromomethane	1	1	0.211	U	0.211	U	ug/L
75-71-8	Dichlorodifluoromethane	1	1	0.145	U	0.145	U	ug/L
100-41-4	Ethylbenzene	1	1	0.109	U	0.109	U	ug/L
87-68-3	Hexachlorobutadiene	1	1	0.265	U	0.265	U	ug/L
98-82-8	Isopropylbenzene (Cumene)	1	1	0.13	U	0.13	U	ug/L
136777-61-2	m,p-Xylene	1	2	0.123	U	0.123	U	ug/L
75-09-2	Methylene chloride	1	5	0.149	U	0.149	U	ug/L
91-20-3	Naphthalene	1	1	0.176	U	0.176	U	ug/L
104-51-8	n-Butylbenzene	1	1	0.123	U	0.123	U	ug/L
103-65-1	n-Propylbenzene	1	1	0.727	U	0.727	U	ug/L
95-47-6	o-Xylene	1	1	0.055	U	0.055	U	ug/L
135-98-8	sec-Butylbenzene	1	1	0.107	U	0.107	U	ug/L
100-42-5	Styrene	1	1	0.089	U	0.089	U	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	1	5	0.078	U	0.078	U	ug/L
98-06-6	tert-Butylbenzene	1	1	0.087	U	0.087	U	ug/L
127-18-4	Tetrachloroethene	1	1	0.193	U	0.193	U	ug/L
108-88-3	Toluene	1	1	0.122	U	0.122	U	ug/L
156-60-5	trans-1,2-Dichloroethene	1	1	0.077	U	0.077	U	ug/L
10061-02-6	trans-1,3-Dichloropropene	1	1	0.128	U	0.128	U	ug/L
79-01-6	Trichloroethene	1	1	0.161	U	0.161	U	ug/L
75-69-4	Trichlorofluoromethane	1	1	0.157	U	0.157	U	ug/L
75-01-4	Vinyl chloride	1	1	0.606	J	0.606	J	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA02MW001D-a**
Location ID: **NA**
Lab Sample ID: **21404241618**
Sample Type: **Field Duplicate**
Method: **EPA 8260B**

Sample Matrix : **W**
Sample Date: **04/25/2014 12:52**
Analysis Date: **05/06/2014 19:06**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	1	0.12	U	0.12	U	ug/L
71-55-6	1,1,1-Trichloroethane	1	1	0.123	U	0.123	U	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	1	0.109	U	0.109	U	ug/L
79-00-5	1,1,2-Trichloroethane	1	1	0.159	U	0.159	U	ug/L
75-34-3	1,1-Dichloroethane	1	1	0.171	U	0.171	U	ug/L
75-35-4	1,1-Dichloroethene	1	1	0.2	U	0.2	U	ug/L
563-58-6	1,1-Dichloropropene	1	1	0.052	U	0.052	U	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	1	0.079	U	0.079	U	ug/L
96-18-4	1,2,3-Trichloropropane	1	1	0.065	U	0.065	U	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	1	0.105	U	0.105	U	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	1	0.084	U	0.084	U	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	1	1	0.194	U	0.194	U	ug/L
106-93-4	1,2-Dibromoethane	1	1	0.102	U	0.102	U	ug/L
95-50-1	1,2-Dichlorobenzene	1	1	0.135	U	0.135	U	ug/L
107-06-2	1,2-Dichloroethane	1	1	0.116	U	0.116	U	ug/L
78-87-5	1,2-Dichloropropane	1	1	0.15	U	0.15	U	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	1	0.066	U	0.066	U	ug/L
541-73-1	1,3-Dichlorobenzene	1	1	0.138	U	0.138	U	ug/L
142-28-9	1,3-Dichloropropane	1	1	0.059	U	0.059	U	ug/L
106-46-7	1,4-Dichlorobenzene	1	1	0.083	U	0.083	U	ug/L
594-20-7	2,2-Dichloropropane	1	1	0.17	U	0.17	U	ug/L
78-93-3	2-Butanone	1	5	0.142	U	0.142	U	ug/L
95-49-8	2-Chlorotoluene	1	1	0.08	U	0.08	U	ug/L
591-78-6	2-Hexanone	1	5	0.122	U	0.122	U	ug/L
106-43-4	4-Chlorotoluene	1	1	0.124	U	0.124	U	ug/L
99-87-6	4-Isopropyltoluene	1	1	0.07	U	0.07	U	ug/L
108-10-1	4-Methyl-2-pentanone	1	5	0.12	U	0.12	U	ug/L
67-64-1	Acetone	1	5	0.193	U	0.193	U	ug/L
71-43-2	Benzene	1	1	0.111	U	0.111	U	ug/L
108-86-1	Bromobenzene	1	1	0.145	U	0.145	U	ug/L
74-97-5	Bromochloromethane	1	1	0.127	U	0.127	U	ug/L
75-27-4	Bromodichloromethane	1	1	0.083	U	0.083	U	ug/L
75-25-2	Bromoform	1	1	0.215	U	0.215	U	ug/L
74-83-9	Bromomethane	1	1	0.427	U	0.427	U	ug/L
75-15-0	Carbon disulfide	1	1	0.19	U	0.19	U	ug/L
56-23-5	Carbon tetrachloride	1	1	0.248	U	0.248	U	ug/L
108-90-7	Chlorobenzene	1	1	0.083	U	0.083	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA02MW001D-a**
Location ID: **NA**
Lab Sample ID: **21404241618**
Sample Type: **Field Duplicate**
Method: **EPA 8260B**

Sample Matrix : **W**
Sample Date: **04/25/2014 12:52**
Analysis Date: **05/06/2014 19:06**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
75-00-3	Chloroethane	1	1	0.235	U	0.235	U	ug/L
67-66-3	Chloroform	1	1	0.155	U	0.155	U	ug/L
74-87-3	Chloromethane	1	1	0.144	U	0.144	U	ug/L
156-59-2	cis-1,2-Dichloroethene	1	1	0.103	U	0.103	U	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	1	0.124	U	0.124	U	ug/L
74-95-3	Dibromomethane	1	1	0.211	U	0.211	U	ug/L
75-71-8	Dichlorodifluoromethane	1	1	0.145	U	0.145	U	ug/L
100-41-4	Ethylbenzene	1	1	0.109	U	0.109	U	ug/L
87-68-3	Hexachlorobutadiene	1	1	0.265	U	0.265	U	ug/L
98-82-8	Isopropylbenzene (Cumene)	1	1	0.13	U	0.13	U	ug/L
136777-61-2	m,p-Xylene	1	2	0.123	U	0.123	U	ug/L
75-09-2	Methylene chloride	1	5	0.149	U	0.149	U	ug/L
91-20-3	Naphthalene	1	1	0.176	U	0.176	U	ug/L
104-51-8	n-Butylbenzene	1	1	0.123	U	0.123	U	ug/L
103-65-1	n-Propylbenzene	1	1	0.727	U	0.727	U	ug/L
95-47-6	o-Xylene	1	1	0.055	U	0.055	U	ug/L
135-98-8	sec-Butylbenzene	1	1	0.107	U	0.107	U	ug/L
100-42-5	Styrene	1	1	0.089	U	0.089	U	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	1	5	0.078	U	0.078	U	ug/L
98-06-6	tert-Butylbenzene	1	1	0.087	U	0.087	U	ug/L
127-18-4	Tetrachloroethene	1	1	0.193	U	0.193	U	ug/L
108-88-3	Toluene	1	1	0.122	U	0.122	U	ug/L
156-60-5	trans-1,2-Dichloroethene	1	1	0.077	U	0.077	U	ug/L
10061-02-6	trans-1,3-Dichloropropene	1	1	0.128	U	0.128	U	ug/L
79-01-6	Trichloroethene	1	1	0.161	U	0.161	U	ug/L
75-69-4	Trichlorofluoromethane	1	1	0.157	U	0.157	U	ug/L
75-01-4	Vinyl chloride	1	1	0.548	J	0.548	J	ug/L

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **TB-7** | Sample Matrix : **W** | Total/Dissolved: **T**

Location ID: **NA** | Sample Date: **04/25/2014 12:52** | Lab: **GCAL**

Lab Sample ID: **21404241619** | Analysis Date: **05/08/2014 19:33**

Sample Type: **Trip Blank**

Method: **EPA 8260B**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
630-20-6	1,1,1,2-Tetrachloroethane	1	1	0.12	U	0.12	U	ug/L	
71-55-6	1,1,1-Trichloroethane	1	1	0.123	U	0.123	U	ug/L	
79-34-5	1,1,2,2-Tetrachloroethane	1	1	0.109	U	0.109	U	ug/L	
79-00-5	1,1,2-Trichloroethane	1	1	0.159	U	0.159	U	ug/L	
75-34-3	1,1-Dichloroethane	1	1	0.171	U	0.171	U	ug/L	
75-35-4	1,1-Dichloroethene	1	1	0.2	U	0.2	U	ug/L	
563-58-6	1,1-Dichloropropene	1	1	0.052	U	0.052	U	ug/L	
87-61-6	1,2,3-Trichlorobenzene	1	1	0.079	U	0.079	U	ug/L	
96-18-4	1,2,3-Trichloropropane	1	1	0.065	U	0.065	U	ug/L	
120-82-1	1,2,4-Trichlorobenzene	1	1	0.105	U	0.105	U	ug/L	
95-63-6	1,2,4-Trimethylbenzene	1	1	0.084	U	0.084	U	ug/L	
96-12-8	1,2-Dibromo-3-chloropropane	1	1	0.194	U	0.194	U	ug/L	
106-93-4	1,2-Dibromoethane	1	1	0.102	U	0.102	U	ug/L	
95-50-1	1,2-Dichlorobenzene	1	1	0.135	U	0.135	U	ug/L	
107-06-2	1,2-Dichloroethane	1	1	0.116	U	0.116	U	ug/L	
78-87-5	1,2-Dichloropropane	1	1	0.15	U	0.15	U	ug/L	
108-67-8	1,3,5-Trimethylbenzene	1	1	0.066	U	0.066	U	ug/L	
541-73-1	1,3-Dichlorobenzene	1	1	0.138	U	0.138	U	ug/L	
142-28-9	1,3-Dichloropropane	1	1	0.059	U	0.059	U	ug/L	
106-46-7	1,4-Dichlorobenzene	1	1	0.083	U	0.083	U	ug/L	
594-20-7	2,2-Dichloropropane	1	1	0.17	U	0.17	U	ug/L	
78-93-3	2-Butanone	1	5	0.142	U	0.142	U	ug/L	
95-49-8	2-Chlorotoluene	1	1	0.08	U	0.08	U	ug/L	
591-78-6	2-Hexanone	1	5	0.122	U	0.122	U	ug/L	
106-43-4	4-Chlorotoluene	1	1	0.124	U	0.124	U	ug/L	
99-87-6	4-Isopropyltoluene	1	1	0.07	U	0.07	U	ug/L	
108-10-1	4-Methyl-2-pentanone	1	5	0.12	U	0.12	U	ug/L	
67-64-1	Acetone	1	5	0.193	UQ	0.193	U	ug/L	*
71-43-2	Benzene	1	1	0.111	U	0.111	U	ug/L	
108-86-1	Bromobenzene	1	1	0.145	U	0.145	U	ug/L	
74-97-5	Bromochloromethane	1	1	0.127	U	0.127	U	ug/L	
75-27-4	Bromodichloromethane	1	1	0.083	U	0.083	U	ug/L	
75-25-2	Bromoform	1	1	0.215	U	0.215	U	ug/L	
74-83-9	Bromomethane	1	1	0.427	U	0.427	U	ug/L	
75-15-0	Carbon disulfide	1	1	0.19	U	0.19	U	ug/L	
56-23-5	Carbon tetrachloride	1	1	0.248	U	0.248	U	ug/L	
108-90-7	Chlorobenzene	1	1	0.083	U	0.083	U	ug/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **TB-7**
Location ID: **NA**
Lab Sample ID: **21404241619**
Sample Type: **Trip Blank**
Method: **EPA 8260B**

Sample Matrix : **W**
Sample Date: **04/25/2014 12:52**
Analysis Date: **05/08/2014 19:33**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
75-00-3	Chloroethane	1	1	0.235	U	0.235	U	ug/L
67-66-3	Chloroform	1	1	0.155	U	0.155	U	ug/L
74-87-3	Chloromethane	1	1	0.144	U	0.144	U	ug/L
156-59-2	cis-1,2-Dichloroethene	1	1	0.103	U	0.103	U	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	1	0.124	U	0.124	U	ug/L
74-95-3	Dibromomethane	1	1	0.211	U	0.211	U	ug/L
75-71-8	Dichlorodifluoromethane	1	1	0.145	U	0.145	U	ug/L
100-41-4	Ethylbenzene	1	1	0.109	U	0.109	U	ug/L
87-68-3	Hexachlorobutadiene	1	1	0.265	U	0.265	U	ug/L
98-82-8	Isopropylbenzene (Cumene)	1	1	0.13	U	0.13	U	ug/L
136777-61-2	m,p-Xylene	1	2	0.123	U	0.123	U	ug/L
75-09-2	Methylene chloride	1	5	1.37	J	1.37	J	ug/L
91-20-3	Naphthalene	1	1	0.176	U	0.176	U	ug/L
104-51-8	n-Butylbenzene	1	1	0.123	U	0.123	U	ug/L
103-65-1	n-Propylbenzene	1	1	0.727	U	0.727	U	ug/L
95-47-6	o-Xylene	1	1	0.055	U	0.055	U	ug/L
135-98-8	sec-Butylbenzene	1	1	0.107	U	0.107	U	ug/L
100-42-5	Styrene	1	1	0.089	U	0.089	U	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	1	5	0.078	U	0.078	U	ug/L
98-06-6	tert-Butylbenzene	1	1	0.087	U	0.087	U	ug/L
127-18-4	Tetrachloroethene	1	1	0.193	U	0.193	U	ug/L
108-88-3	Toluene	1	1	0.122	U	0.122	U	ug/L
156-60-5	trans-1,2-Dichloroethene	1	1	0.077	U	0.077	U	ug/L
10061-02-6	trans-1,3-Dichloropropene	1	1	0.128	U	0.128	U	ug/L
79-01-6	Trichloroethene	1	1	0.161	U	0.161	U	ug/L
75-69-4	Trichlorofluoromethane	1	1	0.157	U	0.157	U	ug/L
75-01-4	Vinyl chloride	1	1	0.127	U	0.127	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Explosives

Melrose AFB
Melrose AFB Annual
SDG: 14042416

COC Sample ID: **MA01MW002**
Location ID: **NA**
Lab Sample ID: **21404241601**
Sample Type: **Site Sample**

Sample Matrix : **W**
Sample Date: **04/23/2014 10:06**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
99-35-4	1,3,5-Trinitrobenzene	EPA 8330A	04/28/2014 18:33	1	1	0.15	U	0.15	U	ug/L	
99-65-0	1,3-Dinitrobenzene	EPA 8330A	04/28/2014 18:33	1	1	0.15	U	0.15	U	ug/L	
118-96-7	2,4,6-Trinitrotoluene	EPA 8330A	04/28/2014 18:33	1	1	0.27	U	0.27	U	ug/L	
121-14-2	2,4-Dinitrotoluene	EPA 8330A	04/28/2014 18:33	1	1	0.29	U	0.29	U	ug/L	
606-20-2	2,6-Dinitrotoluene	EPA 8330A	04/28/2014 18:33	1	1	0.26	U	0.26	U	ug/L	
35572-78-2	2-Amino-4,6-dinitrotoluene	EPA 8330A	04/28/2014 18:33	1	1	0.3	UJ	0.3	U	ug/L	*
88-72-2	2-Nitrotoluene	EPA 8330A	04/28/2014 18:33	1	1	0.17	U	0.17	U	ug/L	
99-08-1	3-Nitrotoluene	EPA 8330A	04/28/2014 18:33	1	1	0.33	UJ	0.33	U	ug/L	*
19406-51-0	4-Amino-2,6-dinitrotoluene	EPA 8330A	04/28/2014 18:33	1	1	0.36	UJ	0.36	U	ug/L	*
99-99-0	4-Nitrotoluene	EPA 8330A	04/28/2014 18:33	1	1	0.42	U	0.42	U	ug/L	
2691-41-0	HMX	EPA 8330A	04/28/2014 18:33	1	1	0.13	U	0.13	U	ug/L	
98-95-3	Nitrobenzene	EPA 8330A	04/28/2014 18:33	1	1	0.23	U	0.23	U	ug/L	
55-63-0	Nitroglycerin	EPA 8330A	04/28/2014 18:33	1	1	0.38	U	0.38	U	ug/L	
78-11-5	Pentaerythritol Tetranitrate	EPA 8330A	04/28/2014 18:33	1	1	0.59	UJ	0.59	U	ug/L	*
121-82-4	RDX	EPA 8330A	04/28/2014 18:33	1	1	0.17	U	0.17	U	ug/L	
479-45-8	Tetryl	EPA 8330A	04/28/2014 18:33	1	1	0.24	U	0.24	U	ug/L	

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Explosives

Melrose AFB
Melrose AFB Annual
SDG: 14042416

COC Sample ID: **MA01MW003**
Location ID: **NA**
Lab Sample ID: **21404241605**
Sample Type: **Site Sample**

Sample Matrix : **W**
Sample Date: **04/23/2014 13:08**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
99-35-4	1,3,5-Trinitrobenzene	EPA 8330A	04/28/2014 21:44	1	1	0.15	U	0.15	U	ug/L
99-65-0	1,3-Dinitrobenzene	EPA 8330A	04/28/2014 21:44	1	1	0.15	U	0.15	U	ug/L
118-96-7	2,4,6-Trinitrotoluene	EPA 8330A	04/28/2014 21:44	1	1	0.27	U	0.27	U	ug/L
121-14-2	2,4-Dinitrotoluene	EPA 8330A	04/28/2014 21:44	1	1	0.29	U	0.29	U	ug/L
606-20-2	2,6-Dinitrotoluene	EPA 8330A	04/28/2014 21:44	1	1	0.26	U	0.26	U	ug/L
35572-78-2	2-Amino-4,6-dinitrotoluene	EPA 8330A	04/28/2014 21:44	1	1	0.3	U	0.3	U	ug/L
88-72-2	2-Nitrotoluene	EPA 8330A	04/28/2014 21:44	1	1	0.17	U	0.17	U	ug/L
99-08-1	3-Nitrotoluene	EPA 8330A	04/28/2014 21:44	1	1	0.33	U	0.33	U	ug/L
19406-51-0	4-Amino-2,6-dinitrotoluene	EPA 8330A	04/28/2014 21:44	1	1	0.36	U	0.36	U	ug/L
99-99-0	4-Nitrotoluene	EPA 8330A	04/28/2014 21:44	1	1	0.42	U	0.42	U	ug/L
2691-41-0	HMX	EPA 8330A	04/28/2014 21:44	1	1	0.13	U	0.13	U	ug/L
98-95-3	Nitrobenzene	EPA 8330A	04/28/2014 21:44	1	1	0.23	U	0.23	U	ug/L
55-63-0	Nitroglycerin	EPA 8330A	04/28/2014 21:44	1	1	0.38	U	0.38	U	ug/L
78-11-5	Pentaerythritol Tetranitrate	EPA 8330A	04/28/2014 21:44	1	1	0.59	U	0.59	U	ug/L
121-82-4	RDX	EPA 8330A	04/28/2014 21:44	1	1	0.17	U	0.17	U	ug/L
479-45-8	Tetryl	EPA 8330A	04/28/2014 21:44	1	1	0.24	U	0.24	U	ug/L

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Explosives

Melrose AFB
Melrose AFB Annual
SDG: 14042416

COC Sample ID: **MA01MW001**
Location ID: **NA**
Lab Sample ID: **21404241606**
Sample Type: **Site Sample**

Sample Matrix : **W**
Sample Date: **04/23/2014 14:16**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
99-35-4	1,3,5-Trinitrobenzene	EPA 8330A	04/28/2014 22:48	1	1	0.15	U	0.15	U	ug/L
99-65-0	1,3-Dinitrobenzene	EPA 8330A	04/28/2014 22:48	1	1	0.15	U	0.15	U	ug/L
118-96-7	2,4,6-Trinitrotoluene	EPA 8330A	04/28/2014 22:48	1	1	0.27	U	0.27	U	ug/L
121-14-2	2,4-Dinitrotoluene	EPA 8330A	04/28/2014 22:48	1	1	0.29	U	0.29	U	ug/L
606-20-2	2,6-Dinitrotoluene	EPA 8330A	04/28/2014 22:48	1	1	0.26	U	0.26	U	ug/L
35572-78-2	2-Amino-4,6-dinitrotoluene	EPA 8330A	04/28/2014 22:48	1	1	0.3	U	0.3	U	ug/L
88-72-2	2-Nitrotoluene	EPA 8330A	04/28/2014 22:48	1	1	0.17	U	0.17	U	ug/L
99-08-1	3-Nitrotoluene	EPA 8330A	04/28/2014 22:48	1	1	0.33	U	0.33	U	ug/L
19406-51-0	4-Amino-2,6-dinitrotoluene	EPA 8330A	04/28/2014 22:48	1	1	0.36	U	0.36	U	ug/L
99-99-0	4-Nitrotoluene	EPA 8330A	04/28/2014 22:48	1	1	0.42	U	0.42	U	ug/L
2691-41-0	HMX	EPA 8330A	04/28/2014 22:48	1	1	0.13	U	0.13	U	ug/L
98-95-3	Nitrobenzene	EPA 8330A	04/28/2014 22:48	1	1	0.23	U	0.23	U	ug/L
55-63-0	Nitroglycerin	EPA 8330A	04/28/2014 22:48	1	1	0.38	U	0.38	U	ug/L
78-11-5	Pentaerythritol Tetranitrate	EPA 8330A	04/28/2014 22:48	1	1	0.59	U	0.59	U	ug/L
121-82-4	RDX	EPA 8330A	04/28/2014 22:48	1	1	0.17	U	0.17	U	ug/L
479-45-8	Tetryl	EPA 8330A	04/28/2014 22:48	1	1	0.24	U	0.24	U	ug/L

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Explosives

Melrose AFB
Melrose AFB Annual
SDG: 14042416

COC Sample ID: **MA01MW004**
Location ID: **NA**
Lab Sample ID: **21404241608**
Sample Type: **Site Sample**

Sample Matrix : **W**
Sample Date: **04/24/2014 10:10**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
99-35-4	1,3,5-Trinitrobenzene	EPA 8330A	04/28/2014 23:52	1	1	0.15	U	0.15	U	ug/L
99-65-0	1,3-Dinitrobenzene	EPA 8330A	04/28/2014 23:52	1	1	0.15	U	0.15	U	ug/L
118-96-7	2,4,6-Trinitrotoluene	EPA 8330A	04/28/2014 23:52	1	1	0.27	U	0.27	U	ug/L
121-14-2	2,4-Dinitrotoluene	EPA 8330A	04/28/2014 23:52	1	1	0.29	U	0.29	U	ug/L
606-20-2	2,6-Dinitrotoluene	EPA 8330A	04/28/2014 23:52	1	1	0.26	U	0.26	U	ug/L
35572-78-2	2-Amino-4,6-dinitrotoluene	EPA 8330A	04/28/2014 23:52	1	1	0.3	U	0.3	U	ug/L
88-72-2	2-Nitrotoluene	EPA 8330A	04/28/2014 23:52	1	1	0.17	U	0.17	U	ug/L
99-08-1	3-Nitrotoluene	EPA 8330A	04/28/2014 23:52	1	1	0.33	U	0.33	U	ug/L
19406-51-0	4-Amino-2,6-dinitrotoluene	EPA 8330A	04/28/2014 23:52	1	1	0.36	U	0.36	U	ug/L
99-99-0	4-Nitrotoluene	EPA 8330A	04/28/2014 23:52	1	1	0.42	U	0.42	U	ug/L
2691-41-0	HMX	EPA 8330A	04/28/2014 23:52	1	1	0.13	U	0.13	U	ug/L
98-95-3	Nitrobenzene	EPA 8330A	04/28/2014 23:52	1	1	0.23	U	0.23	U	ug/L
55-63-0	Nitroglycerin	EPA 8330A	04/28/2014 23:52	1	1	0.38	U	0.38	U	ug/L
78-11-5	Pentaerythritol Tetranitrate	EPA 8330A	04/28/2014 23:52	1	1	0.59	U	0.59	U	ug/L
121-82-4	RDX	EPA 8330A	04/28/2014 23:52	1	1	0.17	U	0.17	U	ug/L
479-45-8	Tetryl	EPA 8330A	04/28/2014 23:52	1	1	0.24	U	0.24	U	ug/L

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Explosives

Melrose AFB
Melrose AFB Annual
SDG: 14042416

COC Sample ID: **M114MW003**
Location ID: **NA**
Lab Sample ID: **21404241609**
Sample Type: **Site Sample**

Sample Matrix : **W**
Sample Date: **04/24/2014 12:00**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
99-35-4	1,3,5-Trinitrobenzene	EPA 8330A	04/29/2014 0:56	1	1	0.15	U	0.15	U	ug/L
99-65-0	1,3-Dinitrobenzene	EPA 8330A	04/29/2014 0:56	1	1	0.15	U	0.15	U	ug/L
118-96-7	2,4,6-Trinitrotoluene	EPA 8330A	04/29/2014 0:56	1	1	0.27	U	0.27	U	ug/L
121-14-2	2,4-Dinitrotoluene	EPA 8330A	04/29/2014 0:56	1	1	0.29	U	0.29	U	ug/L
606-20-2	2,6-Dinitrotoluene	EPA 8330A	04/29/2014 0:56	1	1	0.26	U	0.26	U	ug/L
35572-78-2	2-Amino-4,6-dinitrotoluene	EPA 8330A	04/29/2014 0:56	1	1	0.3	U	0.3	U	ug/L
88-72-2	2-Nitrotoluene	EPA 8330A	04/29/2014 0:56	1	1	0.17	U	0.17	U	ug/L
99-08-1	3-Nitrotoluene	EPA 8330A	04/29/2014 0:56	1	1	0.33	U	0.33	U	ug/L
19406-51-0	4-Amino-2,6-dinitrotoluene	EPA 8330A	04/29/2014 0:56	1	1	0.36	U	0.36	U	ug/L
99-99-0	4-Nitrotoluene	EPA 8330A	04/29/2014 0:56	1	1	0.42	U	0.42	U	ug/L
2691-41-0	HMX	EPA 8330A	04/29/2014 0:56	1	1	0.13	U	0.13	U	ug/L
98-95-3	Nitrobenzene	EPA 8330A	04/29/2014 0:56	1	1	0.23	U	0.23	U	ug/L
55-63-0	Nitroglycerin	EPA 8330A	04/29/2014 0:56	1	1	0.38	U	0.38	U	ug/L
78-11-5	Pentaerythritol Tetranitrate	EPA 8330A	04/29/2014 0:56	1	1	0.59	U	0.59	U	ug/L
121-82-4	RDX	EPA 8330A	04/29/2014 0:56	1	1	0.17	U	0.17	U	ug/L
479-45-8	Tetryl	EPA 8330A	04/29/2014 0:56	1	1	0.24	U	0.24	U	ug/L

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Explosives

Melrose AFB
Melrose AFB Annual
SDG: 14042416

COC Sample ID: **M114MW002**
Location ID: **NA**
Lab Sample ID: **21404241611**
Sample Type: **Site Sample**

Sample Matrix : **W**
Sample Date: **04/24/2014 13:08**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
99-35-4	1,3,5-Trinitrobenzene	EPA 8330A	04/29/2014 2:00	1	1	0.15	U	0.15	U	ug/L
99-65-0	1,3-Dinitrobenzene	EPA 8330A	04/29/2014 2:00	1	1	0.15	U	0.15	U	ug/L
118-96-7	2,4,6-Trinitrotoluene	EPA 8330A	04/29/2014 2:00	1	1	0.27	U	0.27	U	ug/L
121-14-2	2,4-Dinitrotoluene	EPA 8330A	04/29/2014 2:00	1	1	0.29	U	0.29	U	ug/L
606-20-2	2,6-Dinitrotoluene	EPA 8330A	04/29/2014 2:00	1	1	0.26	U	0.26	U	ug/L
35572-78-2	2-Amino-4,6-dinitrotoluene	EPA 8330A	04/29/2014 2:00	1	1	0.3	U	0.3	U	ug/L
88-72-2	2-Nitrotoluene	EPA 8330A	04/29/2014 2:00	1	1	0.17	U	0.17	U	ug/L
99-08-1	3-Nitrotoluene	EPA 8330A	04/29/2014 2:00	1	1	0.33	U	0.33	U	ug/L
19406-51-0	4-Amino-2,6-dinitrotoluene	EPA 8330A	04/29/2014 2:00	1	1	0.36	U	0.36	U	ug/L
99-99-0	4-Nitrotoluene	EPA 8330A	04/29/2014 2:00	1	1	0.42	U	0.42	U	ug/L
2691-41-0	HMX	EPA 8330A	04/29/2014 2:00	1	1	0.13	U	0.13	U	ug/L
98-95-3	Nitrobenzene	EPA 8330A	04/29/2014 2:00	1	1	0.23	U	0.23	U	ug/L
55-63-0	Nitroglycerin	EPA 8330A	04/29/2014 2:00	1	1	0.38	U	0.38	U	ug/L
78-11-5	Pentaerythritol Tetranitrate	EPA 8330A	04/29/2014 2:00	1	1	0.59	U	0.59	U	ug/L
121-82-4	RDX	EPA 8330A	04/29/2014 2:00	1	1	0.17	U	0.17	U	ug/L
479-45-8	Tetryl	EPA 8330A	04/29/2014 2:00	1	1	0.24	U	0.24	U	ug/L

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Explosives

Melrose AFB
Melrose AFB Annual
SDG: 14042416

COC Sample ID: **M114MW001**
Location ID: **NA**
Lab Sample ID: **21404241612**
Sample Type: **Site Sample**

Sample Matrix : **W**
Sample Date: **04/24/2014 14:30**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
99-35-4	1,3,5-Trinitrobenzene	EPA 8330A	04/29/2014 3:04	1	1	0.15	U	0.15	U	ug/L
99-65-0	1,3-Dinitrobenzene	EPA 8330A	04/29/2014 3:04	1	1	0.15	U	0.15	U	ug/L
118-96-7	2,4,6-Trinitrotoluene	EPA 8330A	04/29/2014 3:04	1	1	0.27	U	0.27	U	ug/L
121-14-2	2,4-Dinitrotoluene	EPA 8330A	04/29/2014 3:04	1	1	0.29	U	0.29	U	ug/L
606-20-2	2,6-Dinitrotoluene	EPA 8330A	04/29/2014 3:04	1	1	0.26	U	0.26	U	ug/L
35572-78-2	2-Amino-4,6-dinitrotoluene	EPA 8330A	04/29/2014 3:04	1	1	0.3	U	0.3	U	ug/L
88-72-2	2-Nitrotoluene	EPA 8330A	04/29/2014 3:04	1	1	0.17	U	0.17	U	ug/L
99-08-1	3-Nitrotoluene	EPA 8330A	04/29/2014 3:04	1	1	0.33	U	0.33	U	ug/L
19406-51-0	4-Amino-2,6-dinitrotoluene	EPA 8330A	04/29/2014 3:04	1	1	0.36	U	0.36	U	ug/L
99-99-0	4-Nitrotoluene	EPA 8330A	04/29/2014 3:04	1	1	0.42	U	0.42	U	ug/L
2691-41-0	HMX	EPA 8330A	04/29/2014 3:04	1	1	0.13	U	0.13	U	ug/L
98-95-3	Nitrobenzene	EPA 8330A	04/29/2014 3:04	1	1	0.23	U	0.23	U	ug/L
55-63-0	Nitroglycerin	EPA 8330A	04/29/2014 3:04	1	1	0.38	U	0.38	U	ug/L
78-11-5	Pentaerythritol Tetranitrate	EPA 8330A	04/29/2014 3:04	1	1	0.59	U	0.59	U	ug/L
121-82-4	RDX	EPA 8330A	04/29/2014 3:04	1	1	0.17	U	0.17	U	ug/L
479-45-8	Tetryl	EPA 8330A	04/29/2014 3:04	1	1	0.24	U	0.24	U	ug/L

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Explosives

Melrose AFB
Melrose AFB Annual
SDG: 14042416

COC Sample ID: **M114MW004**
Location ID: **NA**
Lab Sample ID: **21404241614**
Sample Type: **Site Sample**

Sample Matrix : **W**
Sample Date: **04/25/2014 9:25**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
99-35-4	1,3,5-Trinitrobenzene	EPA 8330A	04/29/2014 4:08	1	1	0.15	U	0.15	U	ug/L
99-65-0	1,3-Dinitrobenzene	EPA 8330A	04/29/2014 4:08	1	1	0.15	U	0.15	U	ug/L
118-96-7	2,4,6-Trinitrotoluene	EPA 8330A	04/29/2014 4:08	1	1	0.27	U	0.27	U	ug/L
121-14-2	2,4-Dinitrotoluene	EPA 8330A	04/29/2014 4:08	1	1	0.29	U	0.29	U	ug/L
606-20-2	2,6-Dinitrotoluene	EPA 8330A	04/29/2014 4:08	1	1	0.26	U	0.26	U	ug/L
35572-78-2	2-Amino-4,6-dinitrotoluene	EPA 8330A	04/29/2014 4:08	1	1	0.3	U	0.3	U	ug/L
88-72-2	2-Nitrotoluene	EPA 8330A	04/29/2014 4:08	1	1	0.17	U	0.17	U	ug/L
99-08-1	3-Nitrotoluene	EPA 8330A	04/29/2014 4:08	1	1	0.33	U	0.33	U	ug/L
19406-51-0	4-Amino-2,6-dinitrotoluene	EPA 8330A	04/29/2014 4:08	1	1	0.36	U	0.36	U	ug/L
99-99-0	4-Nitrotoluene	EPA 8330A	04/29/2014 4:08	1	1	0.42	U	0.42	U	ug/L
2691-41-0	HMX	EPA 8330A	04/29/2014 4:08	1	1	0.13	U	0.13	U	ug/L
98-95-3	Nitrobenzene	EPA 8330A	04/29/2014 4:08	1	1	0.23	U	0.23	U	ug/L
55-63-0	Nitroglycerin	EPA 8330A	04/29/2014 4:08	1	1	0.38	U	0.38	U	ug/L
78-11-5	Pentaerythritol Tetranitrate	EPA 8330A	04/29/2014 4:08	1	1	0.59	U	0.59	U	ug/L
121-82-4	RDX	EPA 8330A	04/29/2014 4:08	1	1	0.17	U	0.17	U	ug/L
479-45-8	Tetryl	EPA 8330A	04/29/2014 4:08	1	1	0.24	U	0.24	U	ug/L

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Explosives

Melrose AFB
Melrose AFB Annual
SDG: 14042416

COC Sample ID: **MWQ-24**
Location ID: **NA**
Lab Sample ID: **21404241615**
Sample Type: **Site Sample**

Sample Matrix : **W**
Sample Date: **04/25/2014 11:00**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
99-35-4	1,3,5-Trinitrobenzene	EPA 8330A	04/29/2014 6:16	1	1	0.15	U	0.15	U	ug/L
99-65-0	1,3-Dinitrobenzene	EPA 8330A	04/29/2014 6:16	1	1	0.15	U	0.15	U	ug/L
118-96-7	2,4,6-Trinitrotoluene	EPA 8330A	04/29/2014 6:16	1	1	0.27	U	0.27	U	ug/L
121-14-2	2,4-Dinitrotoluene	EPA 8330A	04/29/2014 6:16	1	1	0.29	U	0.29	U	ug/L
606-20-2	2,6-Dinitrotoluene	EPA 8330A	04/29/2014 6:16	1	1	0.26	U	0.26	U	ug/L
35572-78-2	2-Amino-4,6-dinitrotoluene	EPA 8330A	04/29/2014 6:16	1	1	0.3	U	0.3	U	ug/L
88-72-2	2-Nitrotoluene	EPA 8330A	04/29/2014 6:16	1	1	0.17	U	0.17	U	ug/L
99-08-1	3-Nitrotoluene	EPA 8330A	04/29/2014 6:16	1	1	0.33	U	0.33	U	ug/L
19406-51-0	4-Amino-2,6-dinitrotoluene	EPA 8330A	04/29/2014 6:16	1	1	0.36	U	0.36	U	ug/L
99-99-0	4-Nitrotoluene	EPA 8330A	04/29/2014 6:16	1	1	0.42	U	0.42	U	ug/L
2691-41-0	HMX	EPA 8330A	04/29/2014 6:16	1	1	0.13	U	0.13	U	ug/L
98-95-3	Nitrobenzene	EPA 8330A	04/29/2014 6:16	1	1	0.23	U	0.23	U	ug/L
55-63-0	Nitroglycerin	EPA 8330A	04/29/2014 6:16	1	1	0.38	U	0.38	U	ug/L
78-11-5	Pentaerythritol Tetranitrate	EPA 8330A	04/29/2014 6:16	1	1	0.59	U	0.59	U	ug/L
121-82-4	RDX	EPA 8330A	04/29/2014 6:16	1	1	0.17	U	0.17	U	ug/L
479-45-8	Tetryl	EPA 8330A	04/29/2014 6:16	1	1	0.24	U	0.24	U	ug/L

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Explosives

Melrose AFB
Melrose AFB Annual
SDG: 14042416

COC Sample ID: **MA02MW001D**
Location ID: **NA**
Lab Sample ID: **21404241617**
Sample Type: **Site Sample**

Sample Matrix : **W**
Sample Date: **04/25/2014 12:52**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
99-35-4	1,3,5-Trinitrobenzene	EPA 8330A	04/29/2014 7:20	1	1	0.15	U	0.15	U	ug/L
99-65-0	1,3-Dinitrobenzene	EPA 8330A	04/29/2014 7:20	1	1	0.15	U	0.15	U	ug/L
118-96-7	2,4,6-Trinitrotoluene	EPA 8330A	04/29/2014 7:20	1	1	0.27	U	0.27	U	ug/L
121-14-2	2,4-Dinitrotoluene	EPA 8330A	04/29/2014 7:20	1	1	0.29	U	0.29	U	ug/L
606-20-2	2,6-Dinitrotoluene	EPA 8330A	04/29/2014 7:20	1	1	0.26	U	0.26	U	ug/L
35572-78-2	2-Amino-4,6-dinitrotoluene	EPA 8330A	04/29/2014 7:20	1	1	0.3	U	0.3	U	ug/L
88-72-2	2-Nitrotoluene	EPA 8330A	04/29/2014 7:20	1	1	0.17	U	0.17	U	ug/L
99-08-1	3-Nitrotoluene	EPA 8330A	04/29/2014 7:20	1	1	0.33	U	0.33	U	ug/L
19406-51-0	4-Amino-2,6-dinitrotoluene	EPA 8330A	04/29/2014 7:20	1	1	0.36	U	0.36	U	ug/L
99-99-0	4-Nitrotoluene	EPA 8330A	04/29/2014 7:20	1	1	0.42	U	0.42	U	ug/L
2691-41-0	HMX	EPA 8330A	04/29/2014 7:20	1	1	0.13	U	0.13	U	ug/L
98-95-3	Nitrobenzene	EPA 8330A	04/29/2014 7:20	1	1	0.23	U	0.23	U	ug/L
55-63-0	Nitroglycerin	EPA 8330A	04/29/2014 7:20	1	1	0.38	U	0.38	U	ug/L
78-11-5	Pentaerythritol Tetranitrate	EPA 8330A	04/29/2014 7:20	1	1	0.59	U	0.59	U	ug/L
121-82-4	RDX	EPA 8330A	04/29/2014 7:20	1	1	0.17	U	0.17	U	ug/L
479-45-8	Tetryl	EPA 8330A	04/29/2014 7:20	1	1	0.24	U	0.24	U	ug/L

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Explosives

Melrose AFB
Melrose AFB Annual
SDG: 14042416

COC Sample ID: **MA02MW001D-a**
Location ID: **NA**
Lab Sample ID: **21404241618**
Sample Type: **Field Duplicate**

Sample Matrix : **W**
Sample Date: **04/25/2014 12:52**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
99-35-4	1,3,5-Trinitrobenzene	EPA 8330A	04/29/2014 8:24	1	1	0.15	U	0.15	U	ug/L
99-65-0	1,3-Dinitrobenzene	EPA 8330A	04/29/2014 8:24	1	1	0.15	U	0.15	U	ug/L
118-96-7	2,4,6-Trinitrotoluene	EPA 8330A	04/29/2014 8:24	1	1	0.27	U	0.27	U	ug/L
121-14-2	2,4-Dinitrotoluene	EPA 8330A	04/29/2014 8:24	1	1	0.29	U	0.29	U	ug/L
606-20-2	2,6-Dinitrotoluene	EPA 8330A	04/29/2014 8:24	1	1	0.26	U	0.26	U	ug/L
35572-78-2	2-Amino-4,6-dinitrotoluene	EPA 8330A	04/29/2014 8:24	1	1	0.3	U	0.3	U	ug/L
88-72-2	2-Nitrotoluene	EPA 8330A	04/29/2014 8:24	1	1	0.17	U	0.17	U	ug/L
99-08-1	3-Nitrotoluene	EPA 8330A	04/29/2014 8:24	1	1	0.33	U	0.33	U	ug/L
19406-51-0	4-Amino-2,6-dinitrotoluene	EPA 8330A	04/29/2014 8:24	1	1	0.36	U	0.36	U	ug/L
99-99-0	4-Nitrotoluene	EPA 8330A	04/29/2014 8:24	1	1	0.42	U	0.42	U	ug/L
2691-41-0	HMX	EPA 8330A	04/29/2014 8:24	1	1	0.13	U	0.13	U	ug/L
98-95-3	Nitrobenzene	EPA 8330A	04/29/2014 8:24	1	1	0.23	U	0.23	U	ug/L
55-63-0	Nitroglycerin	EPA 8330A	04/29/2014 8:24	1	1	0.38	U	0.38	U	ug/L
78-11-5	Pentaerythritol Tetranitrate	EPA 8330A	04/29/2014 8:24	1	1	0.59	U	0.59	U	ug/L
121-82-4	RDX	EPA 8330A	04/29/2014 8:24	1	1	0.17	U	0.17	U	ug/L
479-45-8	Tetryl	EPA 8330A	04/29/2014 8:24	1	1	0.24	U	0.24	U	ug/L

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA01MW002**
Location ID: **NA**
Lab Sample ID: **21404241601**
Sample Type: **Site Sample**
Method: **EPA 6020A Dissolved**

Sample Matrix : **W**
Sample Date: **04/23/2014 10:06**
Analysis Date: **04/30/2014 11:04**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7429-90-5	Aluminum	5	100	270		270		ug/L	
7440-36-0	Antimony	5	10	2.5	U	2.5	U	ug/L	
7440-38-2	Arsenic	5	5	1.25	U	1.25	U	ug/L	
7440-39-3	Barium	5	5	15.9		15.9		ug/L	
7440-41-7	Beryllium	5	5	1.25	U	1.25	U	ug/L	
7440-43-9	Cadmium	5	5	1.25	U	1.25	U	ug/L	
7440-70-2	Calcium	5	2500	41900		41900		ug/L	
7440-47-3	Chromium	5	5	3.19	J	3.19	J	ug/L	
7440-48-4	Cobalt	5	5	1.25	U	1.25	U	ug/L	
7440-50-8	Copper	5	5	1.25	U	1.25	U	ug/L	
7439-89-6	Iron	5	500	125	U	125	U	ug/L	
7439-92-1	Lead	5	5	1.25	U	1.25	U	ug/L	
7439-95-4	Magnesium	5	500	34600		34600		ug/L	
7439-96-5	Manganese	5	25	7.52	J	7.52	J	ug/L	
7439-98-7	Molybdenum	5	5	6.67		6.67		ug/L	
7440-02-0	Nickel	5	10	2.5	U	2.5	U	ug/L	
7440-09-7	Potassium	5	500	5830		5830		ug/L	
7782-49-2	Selenium	5	5	5.77		5.77		ug/L	
7440-22-4	Silver	5	5	1.25	U	1.25	UJ	ug/L	*
7440-23-5	Sodium	80	8000	514000		514000		ug/L	
7440-28-0	Thallium	5	5	1.25	U	1.25	U	ug/L	
7440-32-6	Titanium	5	5	6.02		6.02	J	ug/L	*
7440-62-2	Vanadium	5	5	10.5		10.5		ug/L	
7440-66-6	Zinc	5	100	25	U	25	U	ug/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA01MW003**
Location ID: **NA**
Lab Sample ID: **21404241605**
Sample Type: **Site Sample**
Method: **EPA 6020A Dissolved**

Sample Matrix : **W**
Sample Date: **04/23/2014 13:08**
Analysis Date: **04/30/2014 11:36**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7429-90-5	Aluminum	5	100	25	U	25	U	ug/L	
7440-36-0	Antimony	5	10	2.5	U	2.5	U	ug/L	
7440-38-2	Arsenic	5	5	1.25	U	1.25	U	ug/L	
7440-39-3	Barium	5	5	15.1		15.1		ug/L	
7440-41-7	Beryllium	5	5	1.25	U	1.25	U	ug/L	
7440-43-9	Cadmium	5	5	1.25	U	1.25	U	ug/L	
7440-70-2	Calcium	5	2500	66700		66700		ug/L	
7440-47-3	Chromium	5	5	1.25	U	1.25	U	ug/L	
7440-48-4	Cobalt	5	5	1.25	U	1.25	U	ug/L	
7440-50-8	Copper	5	5	1.25	U	1.25	U	ug/L	
7439-89-6	Iron	5	500	125	U	125	U	ug/L	
7439-92-1	Lead	5	5	1.25	U	1.25	U	ug/L	
7439-95-4	Magnesium	80	8000	62200		62200		ug/L	
7439-96-5	Manganese	5	25	6.25	U	6.25	U	ug/L	
7439-98-7	Molybdenum	5	5	3.55	J	3.55	J	ug/L	
7440-02-0	Nickel	5	10	2.5	U	2.5	U	ug/L	
7440-09-7	Potassium	5	500	7110		7110		ug/L	
7782-49-2	Selenium	5	5	5.74		5.74		ug/L	
7440-22-4	Silver	5	5	1.25	U	1.25	UJ	ug/L	*
7440-23-5	Sodium	80	8000	458000		458000		ug/L	
7440-28-0	Thallium	5	5	1.25	U	1.25	U	ug/L	
7440-32-6	Titanium	5	5	1.25	U	1.25	UJ	ug/L	*
7440-62-2	Vanadium	5	5	12.2		12.2		ug/L	
7440-66-6	Zinc	5	100	25	U	25	U	ug/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA01MW001**
Location ID: **NA**
Lab Sample ID: **21404241606**
Sample Type: **Site Sample**
Method: **EPA 6020A Dissolved**

Sample Matrix : **W**
Sample Date: **04/23/2014 14:16**
Analysis Date: **04/30/2014 11:43**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7429-90-5	Aluminum	5	100	25	U	25	U	ug/L	
7440-36-0	Antimony	5	10	2.5	U	2.5	U	ug/L	
7440-38-2	Arsenic	5	5	1.25	U	1.25	U	ug/L	
7440-39-3	Barium	5	5	13.5		13.5		ug/L	
7440-41-7	Beryllium	5	5	1.25	U	1.25	U	ug/L	
7440-43-9	Cadmium	5	5	1.25	U	1.25	U	ug/L	
7440-70-2	Calcium	5	2500	50400		50400		ug/L	
7440-47-3	Chromium	5	5	1.25	U	1.25	U	ug/L	
7440-48-4	Cobalt	5	5	1.25	U	1.25	U	ug/L	
7440-50-8	Copper	5	5	1.35	J	1.35	J	ug/L	
7439-89-6	Iron	5	500	125	U	125	U	ug/L	
7439-92-1	Lead	5	5	1.25	U	1.25	U	ug/L	
7439-95-4	Magnesium	5	500	43100		43100		ug/L	
7439-96-5	Manganese	5	25	6.25	U	6.25	U	ug/L	
7439-98-7	Molybdenum	5	5	5.31		5.31		ug/L	
7440-02-0	Nickel	5	10	2.5	U	2.5	U	ug/L	
7440-09-7	Potassium	5	500	6060		6060		ug/L	
7782-49-2	Selenium	5	5	5.7		5.7		ug/L	
7440-22-4	Silver	5	5	1.25	U	1.25	UJ	ug/L	*
7440-23-5	Sodium	80	8000	587000		587000		ug/L	
7440-28-0	Thallium	5	5	1.25	U	1.25	U	ug/L	
7440-32-6	Titanium	5	5	1.25	U	1.25	UJ	ug/L	*
7440-62-2	Vanadium	5	5	10		10		ug/L	
7440-66-6	Zinc	5	100	25	U	25	U	ug/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA01MW004**
Location ID: **NA**
Lab Sample ID: **21404241608**
Sample Type: **Site Sample**
Method: **EPA 6020A Dissolved**

Sample Matrix : **W**
Sample Date: **04/24/2014 10:10**
Analysis Date: **05/03/2014 2:26**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7429-90-5	Aluminum	2	40	10	U	10	U	ug/L	
7440-36-0	Antimony	2	4	1	U	1	U	ug/L	
7440-38-2	Arsenic	2	2	1.22	J	1.22	J	ug/L	
7440-39-3	Barium	2	2	21		21		ug/L	
7440-41-7	Beryllium	2	2	0.5	U	0.5	U	ug/L	
7440-43-9	Cadmium	2	2	0.5	U	0.5	U	ug/L	
7440-70-2	Calcium	2	1000	42600		42600		ug/L	
7440-47-3	Chromium	2	2	0.69	J	0.69	J	ug/L	
7440-48-4	Cobalt	2	2	0.5	U	0.5	U	ug/L	
7440-50-8	Copper	2	2	0.69	J	0.69	J	ug/L	
7439-89-6	Iron	2	200	50	U	50	U	ug/L	
7439-92-1	Lead	2	2	0.5	U	0.5	U	ug/L	
7439-95-4	Magnesium	50	5000	34400		34400		ug/L	
7439-96-5	Manganese	2	10	2.5	U	2.5	U	ug/L	
7439-98-7	Molybdenum	2	2	5.73		5.73		ug/L	
7440-02-0	Nickel	2	4	1	U	1	U	ug/L	
7440-09-7	Potassium	2	200	5540		5540		ug/L	
7782-49-2	Selenium	2	2	6.76		6.76		ug/L	
7440-22-4	Silver	2	2	0.5	U	0.5	UJ	ug/L	*
7440-23-5	Sodium	50	5000	300000		300000		ug/L	
7440-28-0	Thallium	2	2	0.5	U	0.5	U	ug/L	
7440-32-6	Titanium	2	2	0.5	U	0.5	U	ug/L	
7440-62-2	Vanadium	2	2	17.8		17.8		ug/L	
7440-66-6	Zinc	2	40	10	U	10	U	ug/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **M114MW003**
Location ID: **NA**
Lab Sample ID: **21404241609**
Sample Type: **Site Sample**
Method: **EPA 6020A Dissolved**

Sample Matrix : **W**
Sample Date: **04/24/2014 12:00**
Analysis Date: **05/03/2014 3:33**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7429-90-5	Aluminum	10	200	50	U	50	U	ug/L	
7440-36-0	Antimony	10	20	5	U	5	U	ug/L	
7440-38-2	Arsenic	10	10	2.5	U	2.5	U	ug/L	
7440-39-3	Barium	10	10	14.4		14.4		ug/L	
7440-41-7	Beryllium	10	10	2.5	U	2.5	U	ug/L	
7440-43-9	Cadmium	10	10	2.5	U	2.5	U	ug/L	
7440-70-2	Calcium	10	5000	425000		425000		ug/L	
7440-47-3	Chromium	10	10	2.5	U	2.5	U	ug/L	
7440-48-4	Cobalt	10	10	2.5	U	2.5	U	ug/L	
7440-50-8	Copper	10	10	2.5	U	2.5	U	ug/L	
7439-89-6	Iron	10	1000	250	U	250	U	ug/L	
7439-92-1	Lead	10	10	2.5	U	2.5	U	ug/L	
7439-95-4	Magnesium	500	50000	277000		277000		ug/L	
7439-96-5	Manganese	10	50	12.5	U	12.5	U	ug/L	
7439-98-7	Molybdenum	10	10	7.79	J	7.79	J	ug/L	
7440-02-0	Nickel	10	20	5	U	5	U	ug/L	
7440-09-7	Potassium	10	1000	14600		14600		ug/L	
7782-49-2	Selenium	10	10	30		30		ug/L	
7440-22-4	Silver	10	10	2.5	U	2.5	UJ	ug/L	*
7440-23-5	Sodium	500	50000	2530000		2530000		ug/L	
7440-28-0	Thallium	10	10	2.5	U	2.5	U	ug/L	
7440-32-6	Titanium	10	10	2.5	U	2.5	U	ug/L	
7440-62-2	Vanadium	10	10	9.04	J	9.04	J	ug/L	
7440-66-6	Zinc	10	200	50	U	50	U	ug/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **M114MW002** | Sample Matrix : **W** | Total/Dissolved: **D**

Location ID: **NA** | Sample Date: **04/24/2014 13:08** | Lab: **GCAL**

Lab Sample ID: **21404241611** | Analysis Date: **05/03/2014 3:43**

Sample Type: **Site Sample**

Method: **EPA 6020A Dissolved**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7429-90-5	Aluminum	10	200	50	U	50	U	ug/L	
7440-36-0	Antimony	10	20	5	U	5	U	ug/L	
7440-38-2	Arsenic	10	10	2.5	U	2.5	U	ug/L	
7440-39-3	Barium	10	10	16.3		16.3		ug/L	
7440-41-7	Beryllium	10	10	2.5	U	2.5	U	ug/L	
7440-43-9	Cadmium	10	10	2.5	U	2.5	U	ug/L	
7440-70-2	Calcium	10	5000	340000		340000		ug/L	
7440-47-3	Chromium	10	10	2.5	U	2.5	U	ug/L	
7440-48-4	Cobalt	10	10	2.5	U	2.5	U	ug/L	
7440-50-8	Copper	10	10	2.5	U	2.5	U	ug/L	
7439-89-6	Iron	10	1000	250	U	250	U	ug/L	
7439-92-1	Lead	10	10	2.5	U	2.5	U	ug/L	
7439-95-4	Magnesium	500	50000	275000		275000		ug/L	
7439-96-5	Manganese	10	50	12.5	U	12.5	U	ug/L	
7439-98-7	Molybdenum	10	10	14.5		14.5		ug/L	
7440-02-0	Nickel	10	20	5	U	5	U	ug/L	
7440-09-7	Potassium	10	1000	14700		14700		ug/L	
7782-49-2	Selenium	10	10	16.9		16.9		ug/L	
7440-22-4	Silver	10	10	2.5	U	2.5	UJ	ug/L	*
7440-23-5	Sodium	500	50000	2230000		2230000		ug/L	
7440-28-0	Thallium	10	10	2.5	U	2.5	U	ug/L	
7440-32-6	Titanium	10	10	2.5	U	2.5	U	ug/L	
7440-62-2	Vanadium	10	10	7.1	J	7.1	J	ug/L	
7440-66-6	Zinc	10	200	50	U	50	U	ug/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **M114MW001**
Location ID: **NA**
Lab Sample ID: **21404241612**
Sample Type: **Site Sample**
Method: **EPA 6020A Dissolved**

Sample Matrix : **W**
Sample Date: **04/24/2014 14:30**
Analysis Date: **05/03/2014 3:52**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7429-90-5	Aluminum	10	200	50	U	50	U	ug/L	
7440-36-0	Antimony	10	20	5	U	5	U	ug/L	
7440-38-2	Arsenic	10	10	2.5	U	2.5	U	ug/L	
7440-39-3	Barium	10	10	18.3		18.3		ug/L	
7440-41-7	Beryllium	10	10	2.5	U	2.5	U	ug/L	
7440-43-9	Cadmium	10	10	2.5	U	2.5	U	ug/L	
7440-70-2	Calcium	10	5000	401000		401000		ug/L	
7440-47-3	Chromium	10	10	2.5	U	2.5	U	ug/L	
7440-48-4	Cobalt	10	10	2.5	U	2.5	U	ug/L	
7440-50-8	Copper	10	10	2.5	U	2.5	U	ug/L	
7439-89-6	Iron	10	1000	250	U	250	U	ug/L	
7439-92-1	Lead	10	10	2.5	U	2.5	U	ug/L	
7439-95-4	Magnesium	500	50000	277000		277000		ug/L	
7439-96-5	Manganese	10	50	12.5	U	12.5	U	ug/L	
7439-98-7	Molybdenum	10	10	11.8		11.8		ug/L	
7440-02-0	Nickel	10	20	5	U	5	U	ug/L	
7440-09-7	Potassium	10	1000	15100		15100		ug/L	
7782-49-2	Selenium	10	10	30.9		30.9		ug/L	
7440-22-4	Silver	10	10	2.5	U	2.5	UJ	ug/L	*
7440-23-5	Sodium	500	50000	2290000		2290000		ug/L	
7440-28-0	Thallium	10	10	2.5	U	2.5	U	ug/L	
7440-32-6	Titanium	10	10	2.5	U	2.5	U	ug/L	
7440-62-2	Vanadium	10	10	5.76	J	5.76	J	ug/L	
7440-66-6	Zinc	10	200	50	U	50	U	ug/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **M114MW004**
Location ID: **NA**
Lab Sample ID: **21404241614**
Sample Type: **Site Sample**
Method: **EPA 6020A Dissolved**

Sample Matrix : **W**
Sample Date: **04/25/2014 9:25**
Analysis Date: **05/03/2014 13:34**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7429-90-5	Aluminum	5	100	25	U	25	U	ug/L
7440-36-0	Antimony	5	10	2.5	U	2.5	U	ug/L
7440-38-2	Arsenic	5	5	1.25	U	1.25	U	ug/L
7440-39-3	Barium	5	5	16.3		16.3		ug/L
7440-41-7	Beryllium	5	5	1.25	U	1.25	U	ug/L
7440-43-9	Cadmium	5	5	1.25	U	1.25	U	ug/L
7440-70-2	Calcium	500	250000	439000		439000		ug/L
7440-47-3	Chromium	5	5	1.25	U	1.25	U	ug/L
7440-48-4	Cobalt	5	5	1.25	U	1.25	U	ug/L
7440-50-8	Copper	5	5	1.25	U	1.25	U	ug/L
7439-89-6	Iron	5	500	125	U	125	U	ug/L
7439-92-1	Lead	5	5	1.25	U	1.25	U	ug/L
7439-95-4	Magnesium	500	50000	311000		311000		ug/L
7439-96-5	Manganese	5	25	6.25	U	6.25	U	ug/L
7439-98-7	Molybdenum	5	5	10.9		10.9		ug/L
7440-02-0	Nickel	5	10	2.5	U	2.5	U	ug/L
7440-09-7	Potassium	5	500	15300		15300		ug/L
7782-49-2	Selenium	5	5	22.5		22.5		ug/L
7440-22-4	Silver	5	5	1.25	U	1.25	U	ug/L
7440-23-5	Sodium	500	50000	2390000		2390000		ug/L
7440-28-0	Thallium	5	5	1.25	U	1.25	U	ug/L
7440-32-6	Titanium	5	5	1.25	U	1.25	U	ug/L
7440-62-2	Vanadium	5	5	6.2		6.2		ug/L
7440-66-6	Zinc	5	100	72.7	J	72.7	J	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MWQ-24**
Location ID: **NA**
Lab Sample ID: **21404241615**
Sample Type: **Site Sample**
Method: **EPA 6020A Dissolved**

Sample Matrix : **W**
Sample Date: **04/25/2014 11:00**
Analysis Date: **05/06/2014 11:37**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7429-90-5	Aluminum	1	20	9.06	J	9.06	J	ug/L
7440-36-0	Antimony	1	2	0.5	U	0.5	U	ug/L
7440-38-2	Arsenic	1	1	3.02		3.02		ug/L
7440-39-3	Barium	1	1	56		56		ug/L
7440-41-7	Beryllium	1	1	0.25	U	0.25	U	ug/L
7440-43-9	Cadmium	1	1	0.25	U	0.25	U	ug/L
7440-70-2	Calcium	1	500	43700		43700		ug/L
7440-47-3	Chromium	1	1	0.62	J	0.62	J	ug/L
7440-48-4	Cobalt	1	1	0.25	U	0.25	U	ug/L
7440-50-8	Copper	1	1	0.28	J	0.28	J	ug/L
7439-89-6	Iron	1	100	25	U	25	U	ug/L
7439-92-1	Lead	1	1	0.25	U	0.25	U	ug/L
7439-95-4	Magnesium	10	1000	21700		21700		ug/L
7439-96-5	Manganese	1	5	1.25	U	1.25	U	ug/L
7439-98-7	Molybdenum	1	1	14		14		ug/L
7440-02-0	Nickel	1	2	0.5	U	0.5	U	ug/L
7440-09-7	Potassium	1	100	4610		4610		ug/L
7782-49-2	Selenium	1	1	0.8	J	0.8	J	ug/L
7440-22-4	Silver	1	1	0.25	U	0.25	U	ug/L
7440-23-5	Sodium	10	1000	49900		49900		ug/L
7440-28-0	Thallium	1	1	0.25	U	0.25	U	ug/L
7440-32-6	Titanium	1	1	0.25	U	0.25	U	ug/L
7440-62-2	Vanadium	1	1	19.7		19.7		ug/L
7440-66-6	Zinc	1	20	5	U	5	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA02MW001D**
Location ID: **NA**
Lab Sample ID: **21404241617**
Sample Type: **Site Sample**
Method: **EPA 6020A Dissolved**

Sample Matrix : **W**
Sample Date: **04/25/2014 12:52**
Analysis Date: **05/03/2014 14:51**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7429-90-5	Aluminum	5	100	25	U	25	U	ug/L
7440-36-0	Antimony	5	10	2.5	U	2.5	U	ug/L
7440-38-2	Arsenic	5	5	1.25	U	1.25	U	ug/L
7440-39-3	Barium	5	5	9.89		9.89		ug/L
7440-41-7	Beryllium	5	5	1.25	U	1.25	U	ug/L
7440-43-9	Cadmium	5	5	1.25	U	1.25	U	ug/L
7440-70-2	Calcium	5	2500	133000		133000		ug/L
7440-47-3	Chromium	5	5	1.25	U	1.25	U	ug/L
7440-48-4	Cobalt	5	5	1.25	U	1.25	U	ug/L
7440-50-8	Copper	5	5	1.99	J	1.99	J	ug/L
7439-89-6	Iron	5	500	125	U	125	U	ug/L
7439-92-1	Lead	5	5	1.25	U	1.25	U	ug/L
7439-95-4	Magnesium	500	50000	57200		57200		ug/L
7439-96-5	Manganese	5	25	177		177		ug/L
7439-98-7	Molybdenum	5	5	18.5		18.5		ug/L
7440-02-0	Nickel	5	10	2.5	U	2.5	U	ug/L
7440-09-7	Potassium	5	500	6900		6900		ug/L
7782-49-2	Selenium	5	5	35.9		35.9		ug/L
7440-22-4	Silver	5	5	1.25	U	1.25	U	ug/L
7440-23-5	Sodium	500	50000	2060000		2060000		ug/L
7440-28-0	Thallium	5	5	1.25	U	1.25	U	ug/L
7440-32-6	Titanium	5	5	1.25	U	1.25	U	ug/L
7440-62-2	Vanadium	5	5	4.38	J	4.38	J	ug/L
7440-66-6	Zinc	5	100	25	U	25	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA02MW001D-a**
Location ID: **NA**
Lab Sample ID: **21404241618**
Sample Type: **Field Duplicate**
Method: **EPA 6020A Dissolved**

Sample Matrix : **W**
Sample Date: **04/25/2014 12:52**
Analysis Date: **05/03/2014 15:01**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7429-90-5	Aluminum	5	100	25	U	25	U	ug/L
7440-36-0	Antimony	5	10	2.5	U	2.5	U	ug/L
7440-38-2	Arsenic	5	5	1.26	J	1.26	J	ug/L
7440-39-3	Barium	5	5	9.51		9.51		ug/L
7440-41-7	Beryllium	5	5	1.25	U	1.25	U	ug/L
7440-43-9	Cadmium	5	5	1.25	U	1.25	U	ug/L
7440-70-2	Calcium	5	2500	133000		133000		ug/L
7440-47-3	Chromium	5	5	1.25	U	1.25	U	ug/L
7440-48-4	Cobalt	5	5	1.25	U	1.25	U	ug/L
7440-50-8	Copper	5	5	1.88	J	1.88	J	ug/L
7439-89-6	Iron	5	500	125	U	125	U	ug/L
7439-92-1	Lead	5	5	1.25	U	1.25	U	ug/L
7439-95-4	Magnesium	500	50000	57800		57800		ug/L
7439-96-5	Manganese	5	25	176		176		ug/L
7439-98-7	Molybdenum	5	5	18.9		18.9		ug/L
7440-02-0	Nickel	5	10	2.5	U	2.5	U	ug/L
7440-09-7	Potassium	5	500	6970		6970		ug/L
7782-49-2	Selenium	5	5	36.4		36.4		ug/L
7440-22-4	Silver	5	5	1.25	U	1.25	U	ug/L
7440-23-5	Sodium	500	50000	2090000		2090000		ug/L
7440-28-0	Thallium	5	5	1.25	U	1.25	U	ug/L
7440-32-6	Titanium	5	5	1.25	U	1.25	U	ug/L
7440-62-2	Vanadium	5	5	4.37	J	4.37	J	ug/L
7440-66-6	Zinc	5	100	25	U	25	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA01MW002**
Location ID: **NA**
Lab Sample ID: **21404241601**
Sample Type: **Site Sample**
Method: **EPA 6020A**

Sample Matrix : **W**
Sample Date: **04/23/2014 10:06**
Analysis Date: **04/30/2014 7:49**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7429-90-5	Aluminum	5	100	25	U	25	U	ug/L
7440-36-0	Antimony	5	10	2.5	U	2.5	U	ug/L
7440-38-2	Arsenic	5	5	1.25	U	1.25	U	ug/L
7440-39-3	Barium	5	5	16.7		16.7		ug/L
7440-41-7	Beryllium	5	5	1.25	U	1.25	U	ug/L
7440-43-9	Cadmium	5	5	1.25	U	1.25	U	ug/L
7440-70-2	Calcium	5	2500	45000		45000		ug/L
7440-47-3	Chromium	5	5	1.64	J	1.64	J	ug/L
7440-48-4	Cobalt	5	5	1.25	U	1.25	U	ug/L
7440-50-8	Copper	5	5	1.25	U	1.25	U	ug/L
7439-89-6	Iron	5	500	125	U	125	U	ug/L
7439-92-1	Lead	5	5	1.25	U	1.25	U	ug/L
7439-95-4	Magnesium	5	500	37800		37800		ug/L
7439-96-5	Manganese	5	25	6.25	U	6.25	U	ug/L
7439-98-7	Molybdenum	5	5	6.78		6.78		ug/L
7440-02-0	Nickel	5	10	2.5	U	2.5	U	ug/L
7440-09-7	Potassium	5	500	6300		6300		ug/L
7782-49-2	Selenium	5	5	6.29		6.29		ug/L
7440-22-4	Silver	5	5	1.25	U	1.25	U	ug/L
7440-23-5	Sodium	80	8000	532000		532000		ug/L
7440-28-0	Thallium	5	5	1.25	U	1.25	U	ug/L
7440-32-6	Titanium	5	5	1.25	U	1.25	U	ug/L
7440-62-2	Vanadium	5	5	11.7		11.7		ug/L
7440-66-6	Zinc	5	100	33.7	J	33.7	J	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA01MW003**
Location ID: **NA**
Lab Sample ID: **21404241605**
Sample Type: **Site Sample**
Method: **EPA 6020A**

Sample Matrix : **W**
Sample Date: **04/23/2014 13:08**
Analysis Date: **04/30/2014 9:31**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7429-90-5	Aluminum	5	100	25	U	25	U	ug/L
7440-36-0	Antimony	5	10	2.5	U	2.5	U	ug/L
7440-38-2	Arsenic	5	5	1.25	U	1.25	U	ug/L
7440-39-3	Barium	5	5	14.4		14.4		ug/L
7440-41-7	Beryllium	5	5	1.25	U	1.25	U	ug/L
7440-43-9	Cadmium	5	5	1.25	U	1.25	U	ug/L
7440-70-2	Calcium	5	2500	66300		66300		ug/L
7440-47-3	Chromium	5	5	1.25	U	1.25	U	ug/L
7440-48-4	Cobalt	5	5	1.25	U	1.25	U	ug/L
7440-50-8	Copper	5	5	1.25	U	1.25	U	ug/L
7439-89-6	Iron	5	500	125	U	125	U	ug/L
7439-92-1	Lead	5	5	1.25	U	1.25	U	ug/L
7439-95-4	Magnesium	80	8000	61600		61600		ug/L
7439-96-5	Manganese	5	25	6.25	U	6.25	U	ug/L
7439-98-7	Molybdenum	5	5	3.57	J	3.57	J	ug/L
7440-02-0	Nickel	5	10	2.5	U	2.5	U	ug/L
7440-09-7	Potassium	5	500	6970		6970		ug/L
7782-49-2	Selenium	5	5	5.54		5.54		ug/L
7440-22-4	Silver	5	5	1.25	U	1.25	U	ug/L
7440-23-5	Sodium	80	8000	466000		466000		ug/L
7440-28-0	Thallium	5	5	1.25	U	1.25	U	ug/L
7440-32-6	Titanium	5	5	1.25	U	1.25	U	ug/L
7440-62-2	Vanadium	5	5	12		12		ug/L
7440-66-6	Zinc	5	100	25	U	25	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA01MW001**
Location ID: **NA**
Lab Sample ID: **21404241606**
Sample Type: **Site Sample**
Method: **EPA 6020A**

Sample Matrix : **W**
Sample Date: **04/23/2014 14:16**
Analysis Date: **04/30/2014 9:38**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7429-90-5	Aluminum	5	100	25	U	25	U	ug/L
7440-36-0	Antimony	5	10	2.5	U	2.5	U	ug/L
7440-38-2	Arsenic	5	5	1.25	U	1.25	U	ug/L
7440-39-3	Barium	5	5	14.5		14.5		ug/L
7440-41-7	Beryllium	5	5	1.25	U	1.25	U	ug/L
7440-43-9	Cadmium	5	5	1.25	U	1.25	U	ug/L
7440-70-2	Calcium	5	2500	52700		52700		ug/L
7440-47-3	Chromium	5	5	1.25	U	1.25	U	ug/L
7440-48-4	Cobalt	5	5	1.25	U	1.25	U	ug/L
7440-50-8	Copper	5	5	1.25	U	1.25	U	ug/L
7439-89-6	Iron	5	500	125	U	125	U	ug/L
7439-92-1	Lead	5	5	1.25	U	1.25	U	ug/L
7439-95-4	Magnesium	5	500	45100		45100		ug/L
7439-96-5	Manganese	5	25	6.25	U	6.25	U	ug/L
7439-98-7	Molybdenum	5	5	5.28		5.28		ug/L
7440-02-0	Nickel	5	10	2.5	U	2.5	U	ug/L
7440-09-7	Potassium	5	500	6170		6170		ug/L
7782-49-2	Selenium	5	5	5.2		5.2		ug/L
7440-22-4	Silver	5	5	1.25	U	1.25	U	ug/L
7440-23-5	Sodium	80	8000	609000		609000		ug/L
7440-28-0	Thallium	5	5	1.25	U	1.25	U	ug/L
7440-32-6	Titanium	5	5	1.25	U	1.25	U	ug/L
7440-62-2	Vanadium	5	5	10.2		10.2		ug/L
7440-66-6	Zinc	5	100	25	U	25	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA01MW004**
Location ID: **NA**
Lab Sample ID: **21404241608**
Sample Type: **Site Sample**
Method: **EPA 6020A**

Sample Matrix : **W**
Sample Date: **04/24/2014 10:10**
Analysis Date: **04/30/2014 11:51**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7429-90-5	Aluminum	2	40	10	U	10	U	ug/L
7440-36-0	Antimony	2	4	1	U	1	U	ug/L
7440-38-2	Arsenic	2	2	1.21	J	1.21	J	ug/L
7440-39-3	Barium	2	2	21.8		21.8		ug/L
7440-41-7	Beryllium	2	2	0.5	U	0.5	U	ug/L
7440-43-9	Cadmium	2	2	0.5	U	0.5	U	ug/L
7440-70-2	Calcium	2	1000	42200		42200		ug/L
7440-47-3	Chromium	2	2	0.58	J	0.58	J	ug/L
7440-48-4	Cobalt	2	2	0.5	U	0.5	U	ug/L
7440-50-8	Copper	2	2	0.51	J	0.51	J	ug/L
7439-89-6	Iron	2	200	50	U	50	U	ug/L
7439-92-1	Lead	2	2	0.5	U	0.5	U	ug/L
7439-95-4	Magnesium	50	5000	37200		37200		ug/L
7439-96-5	Manganese	2	10	2.5	U	2.5	U	ug/L
7439-98-7	Molybdenum	2	2	5.68		5.68		ug/L
7440-02-0	Nickel	2	4	1	U	1	U	ug/L
7440-09-7	Potassium	2	200	5550		5550		ug/L
7782-49-2	Selenium	2	2	7		7		ug/L
7440-22-4	Silver	2	2	0.5	U	0.5	U	ug/L
7440-23-5	Sodium	50	5000	322000		322000		ug/L
7440-28-0	Thallium	2	2	0.5	U	0.5	U	ug/L
7440-32-6	Titanium	2	2	0.5	U	0.5	U	ug/L
7440-62-2	Vanadium	2	2	18		18		ug/L
7440-66-6	Zinc	2	40	10	U	10	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **M114MW003**
Location ID: **NA**
Lab Sample ID: **21404241609**
Sample Type: **Site Sample**
Method: **EPA 6020A**

Sample Matrix : **W**
Sample Date: **04/24/2014 12:00**
Analysis Date: **04/30/2014 12:54**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7429-90-5	Aluminum	10	200	50	U	50	U	ug/L
7440-36-0	Antimony	10	20	5	U	5	U	ug/L
7440-38-2	Arsenic	10	10	2.5	U	2.5	U	ug/L
7440-39-3	Barium	10	10	14.9		14.9		ug/L
7440-41-7	Beryllium	10	10	2.5	U	2.5	U	ug/L
7440-43-9	Cadmium	10	10	2.5	U	2.5	U	ug/L
7440-70-2	Calcium	10	5000	414000		414000		ug/L
7440-47-3	Chromium	10	10	2.5	U	2.5	U	ug/L
7440-48-4	Cobalt	10	10	2.5	U	2.5	U	ug/L
7440-50-8	Copper	10	10	2.5	U	2.5	U	ug/L
7439-89-6	Iron	10	1000	250	U	250	U	ug/L
7439-92-1	Lead	10	10	2.5	U	2.5	U	ug/L
7439-95-4	Magnesium	500	50000	299000		299000		ug/L
7439-96-5	Manganese	10	50	12.5	U	12.5	U	ug/L
7439-98-7	Molybdenum	10	10	7.88	J	7.88	J	ug/L
7440-02-0	Nickel	10	20	5	U	5	U	ug/L
7440-09-7	Potassium	10	1000	14600		14600		ug/L
7782-49-2	Selenium	10	10	32.8		32.8		ug/L
7440-22-4	Silver	10	10	2.5	U	2.5	U	ug/L
7440-23-5	Sodium	500	50000	2710000		2710000		ug/L
7440-28-0	Thallium	10	10	2.5	U	2.5	U	ug/L
7440-32-6	Titanium	10	10	2.5	U	2.5	U	ug/L
7440-62-2	Vanadium	10	10	9.5	J	9.5	J	ug/L
7440-66-6	Zinc	10	200	50	U	50	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **M114MW002**
Location ID: **NA**
Lab Sample ID: **21404241611**
Sample Type: **Site Sample**
Method: **EPA 6020A**

Sample Matrix : **W**
Sample Date: **04/24/2014 13:08**
Analysis Date: **04/30/2014 13:01**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7429-90-5	Aluminum	10	200	50	U	50	U	ug/L
7440-36-0	Antimony	10	20	5	U	5	U	ug/L
7440-38-2	Arsenic	10	10	2.5	U	2.5	U	ug/L
7440-39-3	Barium	10	10	15.3		15.3		ug/L
7440-41-7	Beryllium	10	10	2.5	U	2.5	U	ug/L
7440-43-9	Cadmium	10	10	2.5	U	2.5	U	ug/L
7440-70-2	Calcium	10	5000	355000		355000		ug/L
7440-47-3	Chromium	10	10	2.5	U	2.5	U	ug/L
7440-48-4	Cobalt	10	10	2.5	U	2.5	U	ug/L
7440-50-8	Copper	10	10	2.5	U	2.5	U	ug/L
7439-89-6	Iron	10	1000	250	U	250	U	ug/L
7439-92-1	Lead	10	10	2.5	U	2.5	U	ug/L
7439-95-4	Magnesium	500	50000	288000		288000		ug/L
7439-96-5	Manganese	10	50	12.5	U	12.5	U	ug/L
7439-98-7	Molybdenum	10	10	12.9		12.9		ug/L
7440-02-0	Nickel	10	20	5	U	5	U	ug/L
7440-09-7	Potassium	10	1000	14500		14500		ug/L
7782-49-2	Selenium	10	10	18		18		ug/L
7440-22-4	Silver	10	10	2.5	U	2.5	U	ug/L
7440-23-5	Sodium	500	50000	2320000		2320000		ug/L
7440-28-0	Thallium	10	10	2.5	U	2.5	U	ug/L
7440-32-6	Titanium	10	10	2.5	U	2.5	U	ug/L
7440-62-2	Vanadium	10	10	8.14	J	8.14	J	ug/L
7440-66-6	Zinc	10	200	50	U	50	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **M114MW001**
Location ID: **NA**
Lab Sample ID: **21404241612**
Sample Type: **Site Sample**
Method: **EPA 6020A**

Sample Matrix : **W**
Sample Date: **04/24/2014 14:30**
Analysis Date: **04/30/2014 13:09**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7429-90-5	Aluminum	10	200	50	U	50	U	ug/L
7440-36-0	Antimony	10	20	5	U	5	U	ug/L
7440-38-2	Arsenic	10	10	2.5	U	2.5	U	ug/L
7440-39-3	Barium	10	10	18		18		ug/L
7440-41-7	Beryllium	10	10	2.5	U	2.5	U	ug/L
7440-43-9	Cadmium	10	10	2.5	U	2.5	U	ug/L
7440-70-2	Calcium	10	5000	382000		382000		ug/L
7440-47-3	Chromium	10	10	2.5	U	2.5	U	ug/L
7440-48-4	Cobalt	10	10	2.5	U	2.5	U	ug/L
7440-50-8	Copper	10	10	2.5	U	2.5	U	ug/L
7439-89-6	Iron	10	1000	250	U	250	U	ug/L
7439-92-1	Lead	10	10	2.5	U	2.5	U	ug/L
7439-95-4	Magnesium	500	50000	294000		294000		ug/L
7439-96-5	Manganese	10	50	12.5	U	12.5	U	ug/L
7439-98-7	Molybdenum	10	10	11		11		ug/L
7440-02-0	Nickel	10	20	5	U	5	U	ug/L
7440-09-7	Potassium	10	1000	14700		14700		ug/L
7782-49-2	Selenium	10	10	34.1		34.1		ug/L
7440-22-4	Silver	10	10	2.5	U	2.5	U	ug/L
7440-23-5	Sodium	500	50000	2390000		2390000		ug/L
7440-28-0	Thallium	10	10	2.5	U	2.5	U	ug/L
7440-32-6	Titanium	10	10	2.5	U	2.5	U	ug/L
7440-62-2	Vanadium	10	10	6.05	J	6.05	J	ug/L
7440-66-6	Zinc	10	200	50	U	50	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **M114MW004**
Location ID: **NA**
Lab Sample ID: **21404241614**
Sample Type: **Site Sample**
Method: **EPA 6020A**

Sample Matrix : **W**
Sample Date: **04/25/2014 9:25**
Analysis Date: **05/03/2014 9:52**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7429-90-5	Aluminum	5	100	25	U	25	U	ug/L
7440-36-0	Antimony	5	10	2.5	U	2.5	U	ug/L
7440-38-2	Arsenic	5	5	1.25	U	1.25	U	ug/L
7440-39-3	Barium	5	5	16.6		16.6		ug/L
7440-41-7	Beryllium	5	5	1.25	U	1.25	U	ug/L
7440-43-9	Cadmium	5	5	1.25	U	1.25	U	ug/L
7440-70-2	Calcium	500	250000	461000		461000		ug/L
7440-47-3	Chromium	5	5	1.25	U	1.25	U	ug/L
7440-48-4	Cobalt	5	5	1.25	U	1.25	U	ug/L
7440-50-8	Copper	5	5	1.25	U	1.25	U	ug/L
7439-89-6	Iron	5	500	125	U	125	U	ug/L
7439-92-1	Lead	5	5	1.25	U	1.25	U	ug/L
7439-95-4	Magnesium	500	50000	328000		328000		ug/L
7439-96-5	Manganese	5	25	6.25	U	6.25	U	ug/L
7439-98-7	Molybdenum	5	5	11.9		11.9		ug/L
7440-02-0	Nickel	5	10	2.5	U	2.5	U	ug/L
7440-09-7	Potassium	5	500	16300		16300		ug/L
7782-49-2	Selenium	5	5	23.8		23.8		ug/L
7440-22-4	Silver	5	5	1.25	U	1.25	U	ug/L
7440-23-5	Sodium	500	50000	2530000		2530000		ug/L
7440-28-0	Thallium	5	5	1.25	U	1.25	U	ug/L
7440-32-6	Titanium	5	5	1.25	U	1.25	U	ug/L
7440-62-2	Vanadium	5	5	6.68		6.68		ug/L
7440-66-6	Zinc	5	100	64.3	J	64.3	J	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MWQ-24**
Location ID: **NA**
Lab Sample ID: **21404241615**
Sample Type: **Site Sample**
Method: **EPA 6020A**

Sample Matrix : **W**
Sample Date: **04/25/2014 11:00**
Analysis Date: **05/06/2014 11:47**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7429-90-5	Aluminum	1	20	11	J	11	J	ug/L
7440-36-0	Antimony	1	2	0.5	U	0.5	U	ug/L
7440-38-2	Arsenic	1	1	3.01		3.01		ug/L
7440-39-3	Barium	1	1	58.2		58.2		ug/L
7440-41-7	Beryllium	1	1	0.25	U	0.25	U	ug/L
7440-43-9	Cadmium	1	1	0.25	U	0.25	U	ug/L
7440-70-2	Calcium	1	500	45600		45600		ug/L
7440-47-3	Chromium	1	1	0.66	J	0.66	J	ug/L
7440-48-4	Cobalt	1	1	0.25	U	0.25	U	ug/L
7440-50-8	Copper	1	1	0.25	U	0.25	U	ug/L
7439-89-6	Iron	1	100	25	U	25	U	ug/L
7439-92-1	Lead	1	1	0.25	U	0.25	U	ug/L
7439-95-4	Magnesium	10	1000	22500		22500		ug/L
7439-96-5	Manganese	1	5	1.25	U	1.25	U	ug/L
7439-98-7	Molybdenum	1	1	15.1		15.1		ug/L
7440-02-0	Nickel	1	2	0.5	U	0.5	U	ug/L
7440-09-7	Potassium	1	100	4750		4750		ug/L
7782-49-2	Selenium	1	1	0.95	J	0.95	J	ug/L
7440-22-4	Silver	1	1	0.25	U	0.25	U	ug/L
7440-23-5	Sodium	10	1000	52400		52400		ug/L
7440-28-0	Thallium	1	1	0.25	U	0.25	U	ug/L
7440-32-6	Titanium	1	1	0.25	U	0.25	U	ug/L
7440-62-2	Vanadium	1	1	20.9		20.9		ug/L
7440-66-6	Zinc	1	20	5	U	5	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA02MW001D**
Location ID: **NA**
Lab Sample ID: **21404241617**
Sample Type: **Site Sample**
Method: **EPA 6020A**

Sample Matrix : **W**
Sample Date: **04/25/2014 12:52**
Analysis Date: **05/03/2014 10:11**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7429-90-5	Aluminum	5	100	25	U	25	U	ug/L
7440-36-0	Antimony	5	10	2.5	U	2.5	U	ug/L
7440-38-2	Arsenic	5	5	1.25	U	1.25	U	ug/L
7440-39-3	Barium	5	5	10.2		10.2		ug/L
7440-41-7	Beryllium	5	5	1.25	U	1.25	U	ug/L
7440-43-9	Cadmium	5	5	1.25	U	1.25	U	ug/L
7440-70-2	Calcium	5	2500	153000		153000		ug/L
7440-47-3	Chromium	5	5	1.25	U	1.25	U	ug/L
7440-48-4	Cobalt	5	5	1.25	U	1.25	U	ug/L
7440-50-8	Copper	5	5	1.64	J	1.64	J	ug/L
7439-89-6	Iron	5	500	125	U	125	U	ug/L
7439-92-1	Lead	5	5	1.25	U	1.25	U	ug/L
7439-95-4	Magnesium	500	50000	65400		65400		ug/L
7439-96-5	Manganese	5	25	191		191		ug/L
7439-98-7	Molybdenum	5	5	20.2		20.2		ug/L
7440-02-0	Nickel	5	10	2.5	U	2.5	U	ug/L
7440-09-7	Potassium	5	500	7650		7650		ug/L
7782-49-2	Selenium	5	5	36.5		36.5		ug/L
7440-22-4	Silver	5	5	1.25	U	1.25	U	ug/L
7440-23-5	Sodium	500	50000	2350000		2350000		ug/L
7440-28-0	Thallium	5	5	1.25	U	1.25	U	ug/L
7440-32-6	Titanium	5	5	1.25	U	1.25	U	ug/L
7440-62-2	Vanadium	5	5	5.34		5.34		ug/L
7440-66-6	Zinc	5	100	25	U	25	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA02MW001D-a**
Location ID: **NA**
Lab Sample ID: **21404241618**
Sample Type: **Field Duplicate**
Method: **EPA 6020A**

Sample Matrix : **W**
Sample Date: **04/25/2014 12:52**
Analysis Date: **05/03/2014 10:21**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7429-90-5	Aluminum	5	100	25	U	25	U	ug/L
7440-36-0	Antimony	5	10	2.5	U	2.5	U	ug/L
7440-38-2	Arsenic	5	5	1.25	U	1.25	U	ug/L
7440-39-3	Barium	5	5	10		10		ug/L
7440-41-7	Beryllium	5	5	1.25	U	1.25	U	ug/L
7440-43-9	Cadmium	5	5	1.25	U	1.25	U	ug/L
7440-70-2	Calcium	5	2500	138000		138000		ug/L
7440-47-3	Chromium	5	5	1.25	U	1.25	U	ug/L
7440-48-4	Cobalt	5	5	1.25	U	1.25	U	ug/L
7440-50-8	Copper	5	5	2.31	J	2.31	J	ug/L
7439-89-6	Iron	5	500	125	U	125	U	ug/L
7439-92-1	Lead	5	5	1.25	U	1.25	U	ug/L
7439-95-4	Magnesium	500	50000	60300		60300		ug/L
7439-96-5	Manganese	5	25	181		181		ug/L
7439-98-7	Molybdenum	5	5	19.3		19.3		ug/L
7440-02-0	Nickel	5	10	2.5	U	2.5	U	ug/L
7440-09-7	Potassium	5	500	7160		7160		ug/L
7782-49-2	Selenium	5	5	35.5		35.5		ug/L
7440-22-4	Silver	5	5	1.25	U	1.25	U	ug/L
7440-23-5	Sodium	500	50000	2160000		2160000		ug/L
7440-28-0	Thallium	5	5	1.25	U	1.25	U	ug/L
7440-32-6	Titanium	5	5	1.25	U	1.25	U	ug/L
7440-62-2	Vanadium	5	5	4.59	J	4.59	J	ug/L
7440-66-6	Zinc	5	100	25	U	25	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA01MW002**
Location ID: **NA**
Lab Sample ID: **21404241601**
Sample Type: **Site Sample**
Method: **EPA 7470A Dissolved**

Sample Matrix : **W**
Sample Date: **04/23/2014 10:06**
Analysis Date: **04/25/2014 18:23**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7439-97-6	Mercury	1	0.2	0.07	U	0.07	UJ	ug/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA01MW003**
Location ID: **NA**
Lab Sample ID: **21404241605**
Sample Type: **Site Sample**
Method: **EPA 7470A Dissolved**

Sample Matrix : **W**
Sample Date: **04/23/2014 13:08**
Analysis Date: **04/25/2014 18:29**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7439-97-6	Mercury	1	0.2	0.07	U	0.07	UJ	ug/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA01MW001**
Location ID: **NA**
Lab Sample ID: **21404241606**
Sample Type: **Site Sample**
Method: **EPA 7470A Dissolved**

Sample Matrix : **W**
Sample Date: **04/23/2014 14:16**
Analysis Date: **04/25/2014 18:30**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7439-97-6	Mercury	1	0.2	0.07	U	0.07	UJ	ug/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA01MW004**
Location ID: **NA**
Lab Sample ID: **21404241608**
Sample Type: **Site Sample**
Method: **EPA 7470A Dissolved**

Sample Matrix : **W**
Sample Date: **04/24/2014 10:10**
Analysis Date: **04/25/2014 18:51**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7439-97-6	Mercury	1	0.2	0.07	U	0.07	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **M114MW003** Sample Matrix : **W** Total/Dissolved: **D**

Location ID: **NA** Sample Date: **04/24/2014 12:00** Lab: **GCAL**

Lab Sample ID: **21404241609** Analysis Date: **04/25/2014 18:53**

Sample Type: **Site Sample**

Method: **EPA 7470A Dissolved**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7439-97-6	Mercury	1	0.2	0.07	U	0.07	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **M114MW002**
Location ID: **NA**
Lab Sample ID: **21404241611**
Sample Type: **Site Sample**
Method: **EPA 7470A Dissolved**

Sample Matrix : **W**
Sample Date: **04/24/2014 13:08**
Analysis Date: **04/25/2014 18:55**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7439-97-6	Mercury	1	0.2	0.07	U	0.07	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **M114MW001**
Location ID: **NA**
Lab Sample ID: **21404241612**
Sample Type: **Site Sample**
Method: **EPA 7470A Dissolved**

Sample Matrix : **W**
Sample Date: **04/24/2014 14:30**
Analysis Date: **04/25/2014 18:57**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7439-97-6	Mercury	1	0.2	0.07	U	0.07	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **M114MW004**
Location ID: **NA**
Lab Sample ID: **21404241614**
Sample Type: **Site Sample**
Method: **EPA 7470A Dissolved**

Sample Matrix : **W**
Sample Date: **04/25/2014 9:25**
Analysis Date: **04/28/2014 20:51**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7439-97-6	Mercury	1	0.2	0.07	U	0.07	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MWQ-24**
Location ID: **NA**
Lab Sample ID: **21404241615**
Sample Type: **Site Sample**
Method: **EPA 7470A Dissolved**

Sample Matrix : **W**
Sample Date: **04/25/2014 11:00**
Analysis Date: **05/01/2014 16:42**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7439-97-6	Mercury	1	0.2	0.07	U	0.07	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA02MW001D**
Location ID: **NA**
Lab Sample ID: **21404241617**
Sample Type: **Site Sample**
Method: **EPA 7470A Dissolved**

Sample Matrix : **W**
Sample Date: **04/25/2014 12:52**
Analysis Date: **05/01/2014 16:45**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7439-97-6	Mercury	1	0.2	0.07	U	0.07	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA02MW001D-a**
Location ID: **NA**
Lab Sample ID: **21404241618**
Sample Type: **Field Duplicate**
Method: **EPA 7470A Dissolved**

Sample Matrix : **W**
Sample Date: **04/25/2014 12:52**
Analysis Date: **05/01/2014 16:49**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7439-97-6	Mercury	1	0.2	0.07	U	0.07	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA01MW002**
Location ID: **NA**
Lab Sample ID: **21404241601**
Sample Type: **Site Sample**
Method: **EPA 7470A**

Sample Matrix : **W**
Sample Date: **04/23/2014 10:06**
Analysis Date: **04/25/2014 18:11**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7439-97-6	Mercury	1	0.2	0.07	U	0.07	UJ	ug/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA01MW003**
Location ID: **NA**
Lab Sample ID: **21404241605**
Sample Type: **Site Sample**
Method: **EPA 7470A**

Sample Matrix : **W**
Sample Date: **04/23/2014 13:08**
Analysis Date: **04/25/2014 18:20**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7439-97-6	Mercury	1	0.2	0.07	U	0.07	UJ	ug/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA01MW001**
Location ID: **NA**
Lab Sample ID: **21404241606**
Sample Type: **Site Sample**
Method: **EPA 7470A**

Sample Matrix : **W**
Sample Date: **04/23/2014 14:16**
Analysis Date: **04/25/2014 18:21**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7439-97-6	Mercury	1	0.2	0.07	U	0.07	UJ	ug/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA01MW004**
Location ID: **NA**
Lab Sample ID: **21404241608**
Sample Type: **Site Sample**
Method: **EPA 7470A**

Sample Matrix : **W**
Sample Date: **04/24/2014 10:10**
Analysis Date: **04/25/2014 18:35**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7439-97-6	Mercury	1	0.2	0.07	U	0.07	UJ	ug/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **M114MW003**
Location ID: **NA**
Lab Sample ID: **21404241609**
Sample Type: **Site Sample**
Method: **EPA 7470A**

Sample Matrix : **W**
Sample Date: **04/24/2014 12:00**
Analysis Date: **04/25/2014 18:44**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7439-97-6	Mercury	1	0.2	0.07	U	0.07	UJ	ug/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **M114MW002**
Location ID: **NA**
Lab Sample ID: **21404241611**
Sample Type: **Site Sample**
Method: **EPA 7470A**

Sample Matrix : **W**
Sample Date: **04/24/2014 13:08**
Analysis Date: **04/25/2014 18:46**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7439-97-6	Mercury	1	0.2	0.07	U	0.07	UJ	ug/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **M114MW001**
Location ID: **NA**
Lab Sample ID: **21404241612**
Sample Type: **Site Sample**
Method: **EPA 7470A**

Sample Matrix : **W**
Sample Date: **04/24/2014 14:30**
Analysis Date: **04/25/2014 18:48**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7439-97-6	Mercury	1	0.2	0.07	U	0.07	UJ	ug/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **M114MW004**
Location ID: **NA**
Lab Sample ID: **21404241614**
Sample Type: **Site Sample**
Method: **EPA 7470A**

Sample Matrix : **W**
Sample Date: **04/25/2014 9:25**
Analysis Date: **04/28/2014 20:49**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7439-97-6	Mercury	1	0.2	0.07	U	0.07	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MWQ-24**
Location ID: **NA**
Lab Sample ID: **21404241615**
Sample Type: **Site Sample**
Method: **EPA 7470A**

Sample Matrix : **W**
Sample Date: **04/25/2014 11:00**
Analysis Date: **05/01/2014 16:40**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7439-97-6	Mercury	1	0.2	0.07	U	0.07	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA02MW001D**
Location ID: **NA**
Lab Sample ID: **21404241617**
Sample Type: **Site Sample**
Method: **EPA 7470A**

Sample Matrix : **W**
Sample Date: **04/25/2014 12:52**
Analysis Date: **05/01/2014 16:44**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7439-97-6	Mercury	1	0.2	0.07	U	0.07	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA02MW001D-a**
Location ID: **NA**
Lab Sample ID: **21404241618**
Sample Type: **Field Duplicate**
Method: **EPA 7470A**

Sample Matrix : **W**
Sample Date: **04/25/2014 12:52**
Analysis Date: **05/01/2014 16:47**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7439-97-6	Mercury	1	0.2	0.07	U	0.07	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA01MW002** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **1404319-01A** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: SW6860										
Perchlorate	04/23/2014 10:06	05/13/2014 18:03	1	0.0003	0.00142	N	0.00142		ug/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA01MW003** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **1404319-02A** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: SW6860										
Perchlorate	04/23/2014 13:08	05/13/2014 18:51	1	0.0003	0.0002	JN	0.0002	J	ug/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA01MW001** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **1404319-03A** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: SW6860										
Perchlorate	04/23/2014 14:16	05/13/2014 19:07	1	0.0003	0.000174	JN	0.000174	J	ug/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA01MW004** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **1404319-04A** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: SW6860										
Perchlorate	04/24/2014 10:10	05/13/2014 19:23	1	0.0003	0.00238	N	0.00238		ug/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **M114MW003** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **1404319-05A** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: SW6860										
Perchlorate	04/24/2014 12:00	05/14/2014 11:45	1	0.0003	0.00227	N	0.00227		ug/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **M114MW002** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **1404319-06A** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: SW6860										
Perchlorate	04/24/2014 13:08	05/13/2014 19:55	1	0.0003	0.00139	N	0.00139		ug/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **M114MW001** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **1404319-07A** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: SW6860										
Perchlorate	04/24/2014 14:30	05/13/2014 20:11	1	0.0003	0.00193	N	0.00193		ug/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **M114MW004** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **1404319-08A** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: SW6860										
Perchlorate	04/25/2014 9:25	05/13/2014 20:27	1	0.0003	0.00149	N	0.00149		ug/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MWQ-24** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **1404319-09A** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: SW6860										
Perchlorate	05/01/2014 10:16	05/13/2014 20:44	1	0.0003	0.0001	NU	0.0001	U	ug/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA02MW001D** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **1404319-10A** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: SW6860										
Perchlorate	04/25/2014 12:52	05/14/2014 12:01	1	0.00149	0.0112	N	0.0112		ug/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA02MW001D-a** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **1404319-11A** Lab Code: **GCAL**

Sample Type: **Field Duplicate**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: SW6860										
Perchlorate	04/25/2014 12:52	05/14/2014 12:17	1	0.00149	0.0117	N	0.0117		ug/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA01MW002** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **21404241601** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: EPA 300.0										
Chloride	04/23/2014 10:06	04/28/2014 14:21	500	100	439		439		mg/L	
Sulfate	04/23/2014 10:06	04/28/2014 14:21	500	100	527		527		mg/L	
Method: EPA 353.2 Nitrate										
Nitrate	04/23/2014 10:06	04/24/2014 15:09	1	0.01	0.368		0.368		mg/L-N	
Method: EPA 353.2 Nitrite										
Nitrite	04/23/2014 10:06	04/24/2014 15:31	1	0.01	0.006	U	0.006	U	mg/L-N	
Method: EPA 9012B										
Cyanide	04/23/2014 10:06	04/29/2014 16:45	1	0.005	0.0005	U	0.0005	UJ	mg/L	*
Method: SM 2320 B										
Total Alkalinity	04/23/2014 10:06	04/26/2014 11:00	1	1	191		191		mg/L	
Method: SM 2540 C										
Total Dissolved Solids(TDS)	04/23/2014 10:06	04/25/2014 13:01	1	10	1630		1630		mg/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA01MW003** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **21404241605** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: EPA 300.0									
Chloride	04/23/2014 13:08	04/28/2014 13:46	500	100	529		529		mg/L
Sulfate	04/23/2014 13:08	04/28/2014 13:46	500	100	591		591		mg/L
Method: EPA 353.2 Nitrate									
Nitrate	04/23/2014 13:08	04/24/2014 15:12	1	0.01	0.15		0.15		mg/L-N
Method: EPA 353.2 Nitrite									
Nitrite	04/23/2014 13:08	04/24/2014 15:35	1	0.01	0.006	U	0.006	U	mg/L-N
Method: EPA 9012B									
Cyanide	04/23/2014 13:08	04/29/2014 16:48	1	0.005	0.0033	J	0.0033	J	mg/L
Method: SM 2320 B									
Total Alkalinity	04/23/2014 13:08	04/26/2014 11:00	1	1	159		159		mg/L
Method: SM 2540 C									
Total Dissolved Solids(TDS)	04/23/2014 13:08	04/25/2014 13:01	1	10	1660		1660		mg/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA01MW001** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **21404241606** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: EPA 300.0									
Chloride	04/23/2014 14:16	04/28/2014 14:03	500	100	563		563		mg/L
Sulfate	04/23/2014 14:16	04/28/2014 14:03	500	100	678		678		mg/L
Method: EPA 353.2 Nitrate									
Nitrate	04/23/2014 14:16	04/24/2014 15:46	1	0.01	0.209		0.209		mg/L-N
Method: EPA 353.2 Nitrite									
Nitrite	04/23/2014 14:16	04/24/2014 15:36	1	0.01	0.006	U	0.006	U	mg/L-N
Method: EPA 9012B									
Cyanide	04/23/2014 14:16	04/29/2014 16:49	1	0.005	0.0011	J	0.0011	J	mg/L
Method: SM 2320 B									
Total Alkalinity	04/23/2014 14:16	04/26/2014 11:00	1	1	169		169		mg/L
Method: SM 2540 C									
Total Dissolved Solids(TDS)	04/23/2014 14:16	04/25/2014 13:01	1	10	1900		1900		mg/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA01MW004** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **21404241608** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: EPA 300.0									
Chloride	04/24/2014 10:10	04/28/2014 21:06	200	40	270		270		mg/L
Sulfate	04/24/2014 10:10	04/28/2014 21:06	200	40	345		345		mg/L
Method: EPA 353.2 Nitrate									
Nitrate	04/24/2014 10:10	04/25/2014 16:05	2	0.02	0.504		0.504		mg/L-N
Method: EPA 353.2 Nitrite									
Nitrite	04/24/2014 10:10	04/25/2014 16:18	1	0.01	0.006	U	0.006	U	mg/L-N
Method: EPA 9012B									
Cyanide	04/24/2014 10:10	04/29/2014 16:50	1	0.005	0.0008	J	0.0008	J	mg/L
Method: SM 2320 B									
Total Alkalinity	04/24/2014 10:10	04/28/2014 10:10	1	1	196		196		mg/L
Method: SM 2540 C									
Total Dissolved Solids(TDS)	04/24/2014 10:10	04/29/2014 16:54	1	10	888		888		mg/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **M114MW003** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **21404241609** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: EPA 300.0										
Chloride	04/24/2014 12:00	04/28/2014 21:24	1000	200	4080		4080		mg/L	
Sulfate	04/24/2014 12:00	04/28/2014 21:24	1000	200	2170		2170		mg/L	
Method: EPA 353.2 Nitrate										
Nitrate	04/24/2014 12:00	04/25/2014 15:57	1	0.01	0.723		0.723		mg/L-N	
Method: EPA 353.2 Nitrite										
Nitrite	04/24/2014 12:00	04/25/2014 16:21	1	0.01	0.006	U	0.006	U	mg/L-N	
Method: EPA 9012B										
Cyanide	04/24/2014 12:00	04/29/2014 16:51	1	0.005	0.0005	U	0.0005	UJ	mg/L	*
Method: SM 2320 B										
Total Alkalinity	04/24/2014 12:00	04/28/2014 10:10	1	1	56.9		56.9		mg/L	
Method: SM 2540 C										
Total Dissolved Solids(TDS)	04/24/2014 12:00	04/28/2014 14:30	1	10	9310		9310		mg/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **M114MW002** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **21404241611** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: EPA 300.0										
Chloride	04/24/2014 13:08	04/28/2014 21:41	2000	400	3800		3800		mg/L	
Sulfate	04/24/2014 13:08	04/28/2014 21:41	2000	400	1980		1980		mg/L	
Method: EPA 353.2 Nitrate										
Nitrate	04/24/2014 13:08	04/25/2014 15:58	1	0.01	0.224		0.224		mg/L-N	
Method: EPA 353.2 Nitrite										
Nitrite	04/24/2014 13:08	04/25/2014 16:23	1	0.01	0.006	U	0.006	U	mg/L-N	
Method: EPA 9012B										
Cyanide	04/24/2014 13:08	04/29/2014 16:51	1	0.005	0.0005	U	0.0005	UJ	mg/L	*
Method: SM 2320 B										
Total Alkalinity	04/24/2014 13:08	04/28/2014 10:10	1	1	66.7		66.7		mg/L	
Method: SM 2540 C										
Total Dissolved Solids(TDS)	04/24/2014 13:08	04/28/2014 15:45	1	10	7810		7810		mg/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **M114MW001** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **21404241612** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: EPA 300.0										
Chloride	04/24/2014 14:30	04/28/2014 21:59	1000	200	3750		3750		mg/L	
Sulfate	04/24/2014 14:30	04/28/2014 21:59	1000	200	2010		2010		mg/L	
Method: EPA 353.2 Nitrate										
Nitrate	04/24/2014 14:30	04/25/2014 15:59	1	0.01	0.965		0.965		mg/L-N	
Method: EPA 353.2 Nitrite										
Nitrite	04/24/2014 14:30	04/25/2014 16:24	1	0.01	0.006	U	0.006	U	mg/L-N	
Method: EPA 9012B										
Cyanide	04/24/2014 14:30	04/29/2014 16:52	1	0.005	0.0005	U	0.0005	UJ	mg/L	*
Method: SM 2320 B										
Total Alkalinity	04/24/2014 14:30	04/28/2014 10:10	1	1	64.8		64.8		mg/L	
Method: SM 2540 C										
Total Dissolved Solids(TDS)	04/24/2014 14:30	04/28/2014 14:30	1	10	8840		8840		mg/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **M114MW004** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **21404241614** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: EPA 300.0										
Chloride	04/25/2014 9:25	04/29/2014 0:55	2000	400	3930		3930		mg/L	
Sulfate	04/25/2014 9:25	04/29/2014 0:55	2000	400	2040		2040		mg/L	
Method: EPA 353.2 Nitrate										
Nitrate	04/25/2014 9:25	04/26/2014 13:04	2	0.02	0.532		0.532		mg/L-N	
Method: EPA 353.2 Nitrite										
Nitrite	04/25/2014 9:25	04/26/2014 13:39	1	0.01	0.006	U	0.006	U	mg/L-N	
Method: EPA 9012B										
Cyanide	04/25/2014 9:25	04/29/2014 16:53	1	0.005	0.0005	U	0.0005	UJ	mg/L	*
Method: SM 2320 B										
Total Alkalinity	04/25/2014 9:25	04/28/2014 10:10	1	1	64.5		64.5		mg/L	
Method: SM 2540 C										
Total Dissolved Solids(TDS)	04/25/2014 9:25	04/28/2014 14:30	1	10	7950		7950		mg/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MWQ-24** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **21404241615** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: EPA 300.0										
Chloride	04/25/2014 11:00	04/29/2014 1:13	10	2	5.87		5.87		mg/L	
Sulfate	04/25/2014 11:00	04/29/2014 1:13	10	2	62.1		62.1		mg/L	
Method: EPA 353.2 Nitrate										
Nitrate	04/25/2014 11:00	04/26/2014 13:10	5	0.05	1.88		1.88		mg/L-N	
Method: EPA 353.2 Nitrite										
Nitrite	04/25/2014 11:00	04/26/2014 13:43	1	0.01	0.006	U	0.006	U	mg/L-N	
Method: EPA 9012B										
Cyanide	04/25/2014 11:00	04/29/2014 16:56	1	0.005	0.0005	U	0.0005	UJ	mg/L	*
Method: SM 2320 B										
Total Alkalinity	04/25/2014 11:00	04/28/2014 10:10	1	1	218		218		mg/L	
Method: SM 2540 C										
Total Dissolved Solids(TDS)	04/25/2014 11:00	04/28/2014 14:30	1	10	270		270		mg/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA02MW001D** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **21404241617** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: EPA 300.0										
Chloride	04/25/2014 12:52	04/29/2014 1:30	1000	200	2190		2190		mg/L	
Sulfate	04/25/2014 12:52	04/29/2014 1:30	1000	200	2070		2070		mg/L	
Method: EPA 353.2 Nitrate										
Nitrate	04/25/2014 12:52	04/26/2014 13:11	5	0.05	2.24		2.24		mg/L-N	
Method: EPA 353.2 Nitrite										
Nitrite	04/25/2014 12:52	04/26/2014 13:44	1	0.01	0.006	U	0.006	U	mg/L-N	
Method: EPA 9012B										
Cyanide	04/25/2014 12:52	04/29/2014 16:57	1	0.005	0.0005	U	0.0005	UJ	mg/L	*
Method: SM 2320 B										
Total Alkalinity	04/25/2014 12:52	04/28/2014 10:10	1	1	128		128		mg/L	
Method: SM 2540 C										
Total Dissolved Solids(TDS)	04/25/2014 12:52	04/28/2014 14:30	1	10	5730		5730		mg/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA02MW001D-a** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **21404241618** Lab Code: **GCAL**

Sample Type: **Field Duplicate**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: EPA 300.0										
Chloride	04/25/2014 12:52	04/29/2014 1:48	1000	200	2110		2110		mg/L	
Sulfate	04/25/2014 12:52	04/29/2014 1:48	1000	200	2070		2070		mg/L	
Method: EPA 353.2 Nitrate										
Nitrate	04/25/2014 12:52	04/26/2014 13:12	5	0.05	2.85		2.85		mg/L-N	
Method: EPA 353.2 Nitrite										
Nitrite	04/25/2014 12:52	04/26/2014 13:45	1	0.01	0.006	U	0.006	U	mg/L-N	
Method: EPA 9012B										
Cyanide	04/25/2014 12:52	04/29/2014 16:58	1	0.005	0.0005	U	0.0005	UJ	mg/L	*
Method: SM 2320 B										
Total Alkalinity	04/25/2014 12:52	04/28/2014 10:10	1	1	134		134		mg/L	
Method: SM 2540 C										
Total Dissolved Solids(TDS)	04/25/2014 12:52	04/28/2014 14:30	1	10	5960		5960		mg/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA01MW002** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **R1402918-01** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: EPA 218.6									
Hexavalent Chromium, Dissolved	04/23/2014 10:06	05/05/2014 18:14	4	0.08	1.7		1.7		ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA02MW001D** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **R1402918-010** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: EPA 218.6									
Hexavalent Chromium, Dissolved	04/25/2014 12:52	05/05/2014 15:59	1	0.02	0.02	U	0.02	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA02MW001D-a** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **R1402918-011** Lab Code: **GCAL**

Sample Type: **Field Duplicate**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: EPA 218.6									
Hexavalent Chromium, Dissolved	04/25/2014 12:52	05/05/2014 16:07	1	0.02	0.02	U	0.02	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA01MW003** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **R1402918-02** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: EPA 218.6									
Hexavalent Chromium, Dissolved	04/23/2014 13:08	05/05/2014 13:59	1	0.02	0.371		0.371		ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA01MW001** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **R1402918-03** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: EPA 218.6									
Hexavalent Chromium, Dissolved	04/23/2014 14:16	05/05/2014 14:08	1	0.02	0.327		0.327		ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MA01MW004** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **R1402918-04** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: EPA 218.6									
Hexavalent Chromium, Dissolved	04/24/2014 10:10	05/05/2014 14:17	1	0.02	0.643		0.643		ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **M114MW003** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **R1402918-05** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: EPA 218.6									
Hexavalent Chromium, Dissolved	04/24/2014 12:00	05/15/2014 15:16	1	0.02	0.828		0.828		ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **M114MW002** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **R1402918-06** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: EPA 218.6									
Hexavalent Chromium, Dissolved	04/24/2014 13:08	05/05/2014 15:25	1	0.02	0.905		0.905		ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **M114MW001** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **R1402918-07** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: EPA 218.6									
Hexavalent Chromium, Dissolved	04/24/2014 14:30	05/05/2014 15:33	1	0.02	0.847		0.847		ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **M114MW004** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **R1402918-08** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: EPA 218.6									
Hexavalent Chromium, Dissolved	04/25/2014 9:25	05/05/2014 15:42	1	0.02	0.808		0.808		ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14042416

COC Sample ID: **MWQ-24** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **R1402918-09** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: EPA 218.6									
Hexavalent Chromium, Dissolved	05/01/2014 10:16	05/05/2014 15:50	1	0.02	0.604		0.604		ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Appendix II
Chain of Custody

TRINITY ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Page 1 of 1

Project Number: A012-107

Chain of Custody Number (1): 1404230 1

Project Name / Site Name: Melrose Semi Spring 2014

Facility: Melrose Air Force Range

Client Name: USACE ABQ

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart 251-709-6509

Turn Around Time

- 24 Hour ☐
- 7 Day ☐
- Standard X
- Other ☐

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	Sample Code (2)	Sample Number (3)	Sample Matrix (4)	Sample Method (5)	Number of Containers	VOCs 8260B	Explosives 8330	Metals (Total & Diss.) 6020A	Cyanide 9012A	Mercury 7470A	Nitrate, Nitrite 300.0	Chloride, Sulfate 300.0	Perchlorate 6860	Alkalinity 2320B	TDS 2540C	Thallium (Total and Dissolved) 6020A	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID (Alphabetical Notation)
MA01MW002		23042014	1006		N	1	WG		10	X	X	X	X	X	X	X	X	X	X	X				A
MA01MW002-MS		23042014	1006		MS	1	WG		10	X	X	X	X	X	X	X	X	X	X	X				B
MA01MW002-SD		23042014	1006		SD	1	WG		10	X	X	X	X	X	X	X	X	X	X	X				B
TB-1		23042014	1006		TB	1	WQ		3	X														A
MA01MW003		23042014	1308		N	1	WG		10	X	X	X	X	X	X	X	X	X	X	X				A
MA01MW001		23042014	1416		N	1	WG		10	X	X	X	X	X	X	X	X	X	X	X				C
TB-2		23042014	1416		TB	1	WQ		3	X														C

Quality Assurance Samples (7)

Client ID: 4747 - TRINITY Analysis & Development Corp.

SDG: 214042416

Due Date: 05/01/14

Comments: Dissolved metals were field filtered.

3.4 25 2.2 EQ

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received by (Signed)	Date	Time
1.		4-23-14	1700			
2.	Fedex	4/24/14	905	Gaucier	4/24/14	905
3.						

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:	NO	Shipped: No.:	3
Method of Shipment:	Fedex	Airbill Number:	8053 1078 7416
Analytical Lab:	GCAL	Delivery Location:	Baton Rouge, LA
Lab Recipient:		Delivery Date/Time:	

1.) Chain of Custody Number = site name (e.g., SS-125) and then date (yymmdd) collected + custody number (e.g. SS1251207201)...July 20, 2012. (12 Characters Max; No Dashes)

2.) Sample Type Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike (-ms), SD = Matrix Spike Duplicate (-sd), AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-01 on 07/20/12 = 1, if sampled again on 07/20/12 = 2, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Ground Water, WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS= Suface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ= Soil Blanks

5.) Sample Method Codes: CS = Composite Sample, E2 = Elec. Submersible Pump (1982 +), G = Grab, H = Hollow Stem Auger, FP = Peristaltic Pump, W = Swab or Wipe. (See handout for more methods)

6.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

7.) Quality assurance samples are assigned by date and the number (ddmmyyxx) of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or ambient blank collected on July 20, 2012 in association with samples on the COC will be designated **20071201** in the Blank Lot Control Number field).

NOTES: Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c. ERPIMS LOCID for TB, EB and AB are designated as FIELDQC samples.

TRINITY ANALYSIS & DEVELOPMENT CORP
Environmental & Engineering Services

Chain of Custody and Analytical Request

Project Number: A012-107

Chain of Custody Number (1): 1404401

Project Name / Site Name: Melrose Semi Spring 2014

Facility: Melrose Air Force Range

Client Name: USACE ABQ

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart 251-709-6509

Turn Around Time

- 24 Hour ☐
- 7 Day ☐
- Standard X
- Other ☐

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	Sample Code (2)	Sample Number (3)	Sample Matrix (4)	Sample Method (5)	Number of Containers	VOCs 8260B	Explosives 8330	Metals (Total & Diss.) 6020A	Cyanide 9012A	Mercury 7470A	Nitrate, Nitrite 300.0	Chloride, Sulfate 300.0	Perchlorate 6860	Alkalinity 2320B	TDS 2540C	Thallium (Total and Dissolved) 6020A	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID (Alphabetical Notation)	
MA01MW004		24042014	1010		N	1	WG		10	X	X	X	X	X	X	X	X	X	X	X				A	-08
M114MW003		24042014	1200		N	1	WG		10	X	X	X	X	X	X	X	X	X	X	X				A	-09
TB-3		24042014	1016		TB	1	WQ		3	X														A	-10
M114MW002		24042014	1358		N	1	WG		10	X	X	X	X	X	X	X	X	X	X	X				B	-11
M114MW001		24042014	1430		N	1	WG		10	X	X	X	X	X	X	X	X	X	X	X				B	-12
TB-4		24042014	1309		TB	1	WQ		3	X														B	-13

Client ID: 4747 - TRINITY Analysis & Development Corp.

SDG: 214042416

Due Date: 05/01/14

Comments: Dissolved metals were field filtered.

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received by (Signed)	Date	Time
1.		4/24/14	1700	FedEx	4/25/14	1740
2.	FedEx 4/25/14 0915			EBlum	4/25/14	0915
3						

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:	No	Shipped: No.:	2
Method of Shipment:	Fedex	Airbill Number:	
Analytical Lab:	GCAL	Delivery Location:	Baton Rouge, LA
Lab Recipient:		Delivery Date/Time:	

1.) Chain of Custody Number = site name (e.g., *SS-125*) and *then* date (yymmdd) collected + custody number (e.g. **SS125120720**1)... July 20, 2012. (12 Characters Max: No Dashes)

2.) Sample Type Codes: N = Normal Sample, TB = Trip Blank (-e) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment *Blank (-d) Samples*, *MS* = *Matrix* Spike (-ms), SD = Matrix Spike Duplicate (-sd), AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. *Groundwater sample collected from* MW-01 on 07/20/12 = 1, if sampled again on 07/20/12 = 2, etc.)

4.) *Matrix Codes: GS = Soil Gas*, WG = Ground Water , WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS= Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), *SQ= Soil Blanks*

5.) Sample Method Codes: CS = Composite Sample, E2 = Elec. Submersible Pump (1982 +), G = Grab, H = Hollow Stem Auger, *PP = Peristaltic Pump*, *W = Swab* or Wipe. (See handout for more methods)

6.) Sample Analysis Requested: Analytical *method requested and number* of containers provided for each.

7.) Quality assurance samples are assigned by date and the number (oldest=one) of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or *ambient blank collected* on July 20, 2012 in association with samples on the COC will be designated **20071201** in the Blank Lot Control Number field).

NOTES: Trip *Blanks shall correspond* to the first well sampled with VOCs, for example: ST069-MW-08S-a. ERPIMS LOCID for TB, EB and AB are designated as FIELDQC samples.

8053-1078-7424

3.6 E22
2.7

TRINITY ANALYSIS & DEVELOPMENT CORP
Environmental & Engineering Services

Chain of Custody and Analytical Request

Project Number: A012-107

Chain of Custody Number (1): 14042501

Project Name / Site Name: Melrose Semi Spring 2014

Facility: Melrose Air Force Range

Client Name: USACE ABQ

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart 251-709-6509

Turn Around Time

- 24 Hour ☐
- 7 Day ☐
- Standard X
- Other ☐

Sample Analysis Requested (6)

Quality Assurance Samples (7)

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	Sample Code (2)	Sample Number (3)	Sample Matrix (4)	Sample Method (5)	Number of Containers	VOCs 8260B	Explosives 8330	Metals (Total & Diss.) 6020A	Cyanide 9012A	Mercury 7470A	Nitrate, Nitrite 300.0	Chloride, Sulfate 300.0	Perchlorate 6860	Alkalinity 2320B	TDS 2540C	Thallium (Total and Dissolved) 6020A	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID (Alphabetical Notation)
M114MW004		25-04-2014	0935		N	1	WG		10	X	X	X	X	X	X	X	X	X	X	X			~~0~~14	A
MWQ-24		25042014	1100		N	1	WG		10	X	X	X	X	X	X	X	X	X	X	X			15	A
TB-6		25042014	0935		TB	1	WQ		3	X													16	A
MA03MW001D		25042014	1252		N	1	WG		10	X	X	X	X	X	X	X	X	X	X	X			17	B
MA03MW001D-a		25042014	1252		FD	1	WG		10	X	X	X	X	X	X	X	X	X	X	X			18	B
TB-7		25042014	1252		TB	1	WQ		3	X													19	B

Client ID: 4747 - TRINITY Analysis & Development Corp.

SDG: 214042416

Due Date: 05/05/14

Comments: Dissolved metals were field filtered.

8053 1078 7438

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received by (Signed)	Date	Time
1.				Fedex		
2.	Fedex	4/25/14	1600	Allison Nagy	4/26/14	0905
3.		4/26/14	905			

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:	No	Shipped: No.:	2
Method of Shipment:	FedEx	Airbill Number:	
Analytical Lab:	GCAL	Delivery Location:	Baton Rouge, LA
Lab Recipient:		Delivery Date/Time:	

1.0, 1.8 E24

1.) Chain of Custody Number = site name (e.g., SS-125) and then date (yymmdd) collected + custody number (e.g. SS1251207201)....July 20, 2012. (12 Characters Max; No Dashes)

2.) Sample Type Codes: N = Normal Sample, TB = Trip Blank (-e) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike (-ms), SD = Matrix Spike Duplicate (-sd), AB = Ambient Blank (-a)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-01 on 07/20/12 = 1, if sampled again on 07/20/12 = 2, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Ground Water, WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS= Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ= Soil Blanks

5.) Sample Method Codes: CS = Composite Sample, E2 = Elec. Submersible Pump (1982 =), G = Grab, H = Hollow Stem Auger, PP = Peristaltic Pump, W = Swab or Wipe. (See handout for more methods)

6.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

7.) Quality assurance samples are assigned by date and the number (chronological) of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or ambient blank collected on July 20, 2012 in association with samples on the COC will be designated 20071201 in the Blank Lot Control Number field).

NOTES: Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c. ERPIMS LOCID for TB, EB and AB are designated as FIELDQC samples.

Data Validation Report

Melrose 2014 Annual

Trinity Analysis & Development Corp

SDG: 214043009 Date: October 9, 2014

eDATApro

Environmental Data Professional, LLC
1432 Watkins Street • Lake Charles, LA 70601 • phone: 337-540-0036 • fax: 337-478-6061

Disclaimer:

The validation performed and reported herein is based on specifications and procedures presented to eDATApro with the associated data package. Any qualifications or review not specified with package requirements was based on USEPA National Functional Guidelines for Inorganic and Organic Data Review.

Information contained in this report is based solely on the hardcopy and/or electronic deliverables that were submitted to eDATApro. eDATApro reserves the rights to modify or change the validation report if new information is presented or if this report is determined to be inaccurate or incomplete.

Cover Letter

Validation Report Date: October 9, 2014

Sample Delivery Group: 214043009

Project Name: Melrose 2014 Annual

Data validation personnel: Dana Hebert and Tony Duhon

Data Deliverables Included:

Validation Report:

__✓__ Introduction

__✓__ Sample Identification Cross- Reference Table

__✓__ Data Validation Components

__✓__ Data Validation Findings Summary

__✓__ Table 1-1, Summary of Qualified Data

__✓__ Table 1-2, Data Qualifier Reference Table

__✓__ Appendix I, Form I Data (qualified)

__✓__ Appendix II, Chain of Custody

Approval Signature: Anthony Duhon Date: October 9, 2014

INTRODUCTION:

SDG: 214043009
Project Name: Melrose 2014 Annual
Laboratory: Gulf Coast Analytical Laboratories/DHL Analytical/ALS Environmental
Matrix: Waters

Environmental Data Professional, LLC (eDATApro) received one electronic data package containing the results for seven field samples, one field duplicate and one matrix spike pair. Level III Data Validation was performed according to guidance from *USEPA National Functional Guidelines for Organic Data Review, USEPA National Functional Guidelines for Inorganic Data Review* and the project specific Quality Assurance Project Plan.

The following samples were reviewed:

Sample ID	Lab ID	Collection Date/Time	Analyses
MWQ-19	21404300901	04/29/2014 08:41 AM	[1-11]
MWQ-18	21404300902	04/29/2014 09:31 AM	[1-11]
MWQ-21	21404300903	04/29/2014 12:41 PM	[1-11]
MWQ-22	21404300904	04/30/2014 08:41 AM	[1-11]
MWQ-22-a	21404300905	04/30/2014 08:41 AM	[1-11]
MWQ-2	21404300906	04/30/2014 10:46 AM	[1-11]
MWQ-2-ms	21404300907	04/30/2014 10:46 AM	[1-11]
MWQ-2-sd	21404300908	04/30/2014 10:46 AM	[1-11]
MWQ-14	21404300909	05/01/2014 07:51 AM	[1-11]
MWQ-20	21404300910	05/01/2014 10:16 AM	[1-11]

Analyses Performed Codes:

[1] TAL Metals (Total) – SW-846 6020A
[2] TAL Metals (Dissolved) – SW-846 6020A
[3] Mercury (Total) – SW-846 7470A
[4] Mercury (Dissolved) – SW-846 7470A
[5] Chloride and Sulfate – EPA 300.0
[6] Nitrate and Nitrite – EPA 353.2
[7] Total Cyanide – SW-846 9012B
[8] Total Alkalinity – SM 2320B
[9] Total Dissolved Solids – SM 2540C
[10] Perchlorate – SW-846 6860 (DHL Analytical)
[11] Hexavalent Chromium, Dissolved – EPA 218.6 (ALS Environmental)

DATA VALIDATION COMPONENTS

The data presented in this validation report was reviewed using a systematic process for evaluating performance and compliance of a set of data when compared to a set of standards to ascertain its completeness, correctness, and consistency using the methods and/or project defined criteria. The following components, as applicable to each analytical method, were reviewed in conducting the data validation:

- Data Completeness and Deliverables
- Sample Receipt (Chain of Custody Record)
    - Sample ID
    - Collection Date/Time
    - Matrix
    - Analysis Requests
- Chemical/Temperature Preservation
- Holding Times
- Analytical/Method Performance
    - Instrument Performance Checks
    - Instrument Calibrations
        - Stability of Analyte Response (Average Response Factor)
        - Linearity of Analytical Response (Correlation Coefficient)
        - Initial Calibration (multi-point)
        - Calibration Verification
    - Method Quality Controls
        - Instrument/Method Blank
        - Laboratory Control Sample
        - Laboratory Duplicate/Replicate
        - Surrogates
        - Internal Standards
        - Interference Check Sample
        - ICP Serial Dilution
    - Preparation Batch Quality Control
        - Preparation Blank
        - Laboratory Control Sample
        - Matrix Spikes
- Field Quality Controls
    - Field Duplicate
    - Field/Equipment Rinsate/Trip Blanks

Unless specifically stated otherwise in the method summary sections of this report, all components evaluated and data presented by the laboratory met the applicable acceptance criteria and are considered fully usable.

DATA VALIDATION FINDINGS SUMMARY

I. General Package:

A final laboratory data package compliant for level III data validation was received on September 22, 2014.

When necessary, dilution analyses were performed to minimize sample matrix interference and/or obtain analyte measurements within the linear range of calibration. Reporting limits were adjusted accordingly.

Comparisons between target analyte measurements in sample MWQ-22 and field duplicate sample MWQ-22-a were within precision acceptance criteria unless specifically noted in an analytical method section. Field precision is used to demonstrate consistency in sample collection and homogeneity in sample matrix.

II. Method SW-846 6020A – TAL metals (total)

Estimate concentrations of Calcium and Nickel were present in the preparation blank associated with samples MWQ-19, MWQ-18 and MWQ-21. The estimate concentration of Nickel reported for sample MWQ-21 was less than five times (5x) the blank concentration. The result for Nickel in sample MWQ-21 was modified to non-detect (U) at the reporting limit.

Estimate concentrations of Manganese and Selenium were present in the preparation blank associated with samples MWQ-22, MWQ-22-a and MWQ-2. The estimate concentrations of Selenium reported for these samples were less than five times (5x) the blank concentration. The estimate concentrations of Selenium in these samples were modified to non-detect (U) at the corresponding reporting limits.

Estimate concentrations of Calcium and Manganese were present in the preparation blank associated with samples MWQ-14 and MWQ-20. The concentrations of these analytes in the noted samples were greater than five times (5x) the blank concentration. No data qualifications were necessary.

Recoveries of Antimony in the matrix spike (MS) and matrix spike duplicate (MSD) analyses of sample MWQ-19 exceeded upper acceptance criteria. Results reported as non-detect or estimate for the associated samples were not affected. No data qualifications were necessary.

Recoveries of Copper and Lead in the MS and MSD analyses of sample MWQ-19 exceeded lower acceptance criteria. Recovery of Lead in the associated post digestion spike (PDS) exceeded lower acceptance criteria. Results reported as estimate for the associated samples were not affected. The results for Copper in sample MWQ-19 and Lead in sample MWQ-18 were modified to non-detect estimate (UJ). The concentration of Lead for sample MWQ-19 was modified to estimate (J).

Recoveries of Calcium, Magnesium and Sodium in the MS and MSD analyses of sample MWQ-19 exceeded acceptance criteria; however, the un-spiked sample

concentrations of these analytes were greater than four times (4x) the concentration of the analyte fortification. No data qualifications were necessary.

Recoveries of Silver in the MS and MSD analyses of sample MWQ-2 exceeded lower acceptance criteria. The results for Silver in samples MWQ-2, MWQ-22 and MWQ-22-a were modified to non-detect estimate (UJ).

Recoveries of Sodium in the MS and MSD analyses of sample MWQ-2 exceeded acceptance criteria; however, the un-spiked sample concentrations of this analyte was greater than four times (4x) the concentration of the analyte fortification. No data qualifications were necessary.

All other quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria.

III. Method SW-846 6020A – TAL metals (dissolved)

The validated concentrations of several dissolved metals were greater than the corresponding total metals concentrations. Laboratory results are not qualified based on this relationship. These observations are for informational purposes only.

Recoveries of Dissolved Silver in the MS and MSD analyses of sample MWQ-19 and MWQ-2 exceeded lower acceptance criteria. The results for Dissolved Silver in the associated samples were modified to non-detect estimate (UJ).

Recoveries of Dissolved Calcium and Dissolved Sodium in the MS analyses of sample MWQ-19, Dissolved Magnesium and Dissolved Sodium in the MS analyses of sample MWQ-2 and Dissolved Sodium in the MS analyses of sample MWQ-14 exceeded acceptance criteria; however, the un-spiked sample concentrations of these analytes were greater than four times (4x) the concentrations of the analyte fortifications. No data qualifications were necessary.

All other quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria.

IV. Method SW-846 7470A – Mercury (total)

Recoveries of Mercury in the MS and MSD analyses of sample MWQ-2 exceeded lower acceptance criteria. The results for Mercury in samples MWQ-2, MWQ-22 and MWQ-22-a were modified to non-detect estimate (UJ).

All other quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria.

V. Method SW-846 7470A – Mercury (dissolved)

Recoveries of Dissolved Mercury in the MS and MSD analyses of sample MWQ-2 exceeded lower acceptance criteria. The results for Dissolved Mercury in samples MWQ-2, MWQ-22 and MWQ-22-a were modified to non-detect estimate (UJ).

All other quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria.

VI. Method EPA 300.0 – Sulfate and Chloride

All quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria; therefore, no data qualifications were necessary.

VII. Method EPA 353.2 – Nitrate and Nitrite

Recoveries of Nitrate in the MS and MSD analyses of sample MWQ-20 exceeded lower acceptance criteria. Nitrate results in field samples were modified to either estimate (J) or non-detect estimate (UJ).

All other quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria.

VIII. Method SW-846 9012B – Total Cyanide

All quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria; therefore, no data qualifications were necessary.

IX. Method SM 2320B – Total Alkalinity

All quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria; therefore, no data qualifications were necessary.

X. Method SM 2540C - Total Dissolved Solids

All quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria; therefore, no data qualifications were necessary.

XI. Method SW-846 6860 – Perchlorate

The Perchlorate analyses were performed by DHL Analytical in Round Rock, Texas. The laboratory results and QA/QC results were reported with “N” qualifiers and noted as “not NELAC certified”. These qualifiers were removed.

All quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria; therefore, no data qualifications were necessary.

XII. Method EPA 218.6 – Hexavalent Chromium

The Hexavalent Chromium analyses were performed by ALS Environmental in Rochester, New York.

All quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria; therefore, no data qualifications were necessary.

Table 1-1

SUMMARY OF QUALIFIED DATA

Target Compound	Sample(s) Affected	Lab Result	Lab Qual	Val Result	Val Qual	Reason for Qualification
Copper	MWQ-19	1.25	U	1.25	UJ	Low recoveries in MS & MSD.
Lead	MWQ-18	0.25	U	0.25	UJ	Low recoveries in MS, MSD & PDS
	MWQ-19	120		120	J	
Mercury	MWQ-2	0.07	U	0.07	UJ	Low recoveries in MS & MSD.
	MWQ-22	0.07	U	0.07	UJ	
	MWQ-22-a	0.07	U	0.07	UJ	
Mercury, Dissolved	MWQ-2	0.07	U	0.07	UJ	
	MWQ-22	0.07	U	0.07	UJ	
	MWQ-22-a	0.07	U	0.07	UJ	
Nickel	MWQ-21	0.71	J	2	U	Analyte present in method blank.
Selenium	MWQ-2	3.39	J	10	U	
	MWQ-22	0.71	J	2	U	
	MWQ-22-a	0.78	J	2	U	
Silver	MWQ-2	2.5	U	2.5	UJ	Low recoveries in MS & MSD.
	MWQ-22	0.5	U	0.5	UJ	
	MWQ-22-a	0.5	U	0.5	UJ	
Silver, Dissolved	MWQ-18	0.25	U	0.25	UJ	
	MWQ-19	1.25	U	1.25	UJ	
	MWQ-2	2.5	U	2.5	UJ	
	MWQ-21	0.25	U	0.25	UJ	
	MWQ-22	0.5	U	0.5	UJ	
	MWQ-22-a	0.5	U	0.5	UJ	
Nitrate	MWQ-14	1.29		1.29	J	Low recoveries in MS & MSD.
	MWQ-18	0.298		0.298	J	
	MWQ-19	0.008	U	0.008	UJ	
	MWQ-2	0.157		0.157	J	
	MWQ-20	0.03		0.03	J	
	MWQ-21	1.47		1.47	J	
	MWQ-22	0.008	U	0.008	UJ	
	MWQ-22-a	0.008	U	0.008	UJ	
Perchlorate	MWQ-14	0.0026	N	0.0026		Removal of laboratory notation qualifier.
	MWQ-18	0.00283	N	0.00283		
	MWQ-19	0.0001	UN	0.0001	U	
	MWQ-2	0.0001	UN	0.0001	U	
	MWQ-20	0.0001	UN	0.0001	U	
	MWQ-21	0.00559	N	0.00559		
	MWQ-22	0.0001	UN	0.0001	U	
	MWQ-22-a	0.0001	UN	0.0001	U	

Table 1-2

DATA QUALIFIER REFERENCE

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
B	Analyte detected in the method blank of the associated sample batch.	Analyte detected in the calibration/method blank of the associated sample batch.
NJ	The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated numerical value represents its approximate concentration.	Not applicable.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet the quality control criteria. The presence or absence of the analyte cannot be verified.	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet the quality control criteria. The presence or absence of the analyte cannot be verified.

Laboratory Qualifiers

Qualifier	Organics	Inorganics
N	Not NELAC Certified.	Not NELAC Certified.
Q	LCS/LCSD recovery and/or RPD was outside control limits/CCV did not meet acceptance criteria.	LCS/LCSD recovery and/or RPD was outside control limits/CCV did not meet acceptance criteria.

Appendix I
Form 1 Data (Qualified)

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-19**
Location ID: **NA**
Lab Sample ID: **21404300901**
Sample Type: **Site Sample**
Method: **EPA 6020A Dissolved**

Sample Matrix : **W**
Sample Date: **04/29/2014 8:41**
Analysis Date: **05/08/2014 2:37**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7429-90-5	Aluminum	5	100	25	U	25	U	ug/L	
7440-36-0	Antimony	5	10	2.5	U	2.5	U	ug/L	
7440-38-2	Arsenic	5	5	1.25	U	1.25	U	ug/L	
7440-39-3	Barium	5	5	32.9		32.9		ug/L	
7440-41-7	Beryllium	5	5	1.25	U	1.25	U	ug/L	
7440-43-9	Cadmium	5	5	1.25	U	1.25	U	ug/L	
7440-70-2	Calcium	250	125000	351000		351000		ug/L	
7440-47-3	Chromium	5	5	1.25	U	1.25	U	ug/L	
7440-48-4	Cobalt	5	5	1.25	U	1.25	U	ug/L	
7440-50-8	Copper	5	5	1.25	U	1.25	U	ug/L	
7439-89-6	Iron	5	500	1240		1240		ug/L	
7439-92-1	Lead	5	5	1.25	U	1.25	U	ug/L	
7439-95-4	Magnesium	250	25000	186000		186000		ug/L	
7439-96-5	Manganese	5	25	364		364		ug/L	
7439-98-7	Molybdenum	5	5	1.3	J	1.3	J	ug/L	
7440-02-0	Nickel	5	10	2.5	U	2.5	U	ug/L	
7440-09-7	Potassium	5	500	8960		8960		ug/L	
7782-49-2	Selenium	5	5	1.62	J	1.62	J	ug/L	
7440-22-4	Silver	5	5	1.25	U	1.25	UJ	ug/L	*
7440-23-5	Sodium	250	25000	1070000		1070000		ug/L	
7440-28-0	Thallium	5	5	1.25	U	1.25	U	ug/L	
7440-32-6	Titanium	5	5	1.25	U	1.25	U	ug/L	
7440-62-2	Vanadium	5	5	1.25	U	1.25	U	ug/L	
7440-66-6	Zinc	5	100	25	U	25	U	ug/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-18**
Location ID: **NA**
Lab Sample ID: **21404300902**
Sample Type: **Site Sample**
Method: **EPA 6020A Dissolved**

Sample Matrix : **W**
Sample Date: **04/29/2014 9:31**
Analysis Date: **05/08/2014 3:15**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7429-90-5	Aluminum	1	20	13.9	J	13.9	J	ug/L	
7440-36-0	Antimony	1	2	0.5	U	0.5	U	ug/L	
7440-38-2	Arsenic	1	1	7.83		7.83		ug/L	
7440-39-3	Barium	1	1	33.5		33.5		ug/L	
7440-41-7	Beryllium	1	1	0.25	U	0.25	U	ug/L	
7440-43-9	Cadmium	1	1	0.25	U	0.25	U	ug/L	
7440-70-2	Calcium	1	500	47700		47700		ug/L	
7440-47-3	Chromium	1	1	0.65	J	0.65	J	ug/L	
7440-48-4	Cobalt	1	1	0.25	U	0.25	U	ug/L	
7440-50-8	Copper	1	1	0.45	J	0.45	J	ug/L	
7439-89-6	Iron	1	100	25	U	25	U	ug/L	
7439-92-1	Lead	1	1	0.25	U	0.25	U	ug/L	
7439-95-4	Magnesium	10	1000	20000		20000		ug/L	
7439-96-5	Manganese	1	5	1.25	U	1.25	U	ug/L	
7439-98-7	Molybdenum	1	1	4.47		4.47		ug/L	
7440-02-0	Nickel	1	2	0.5	U	0.5	U	ug/L	
7440-09-7	Potassium	1	100	2700		2700		ug/L	
7782-49-2	Selenium	1	1	2.9		2.9		ug/L	
7440-22-4	Silver	1	1	0.25	U	0.25	UJ	ug/L	*
7440-23-5	Sodium	10	1000	64400		64400		ug/L	
7440-28-0	Thallium	1	1	0.25	U	0.25	U	ug/L	
7440-32-6	Titanium	1	1	0.32	J	0.32	J	ug/L	
7440-62-2	Vanadium	1	1	57.7		57.7		ug/L	
7440-66-6	Zinc	1	20	7.15	J	7.15	J	ug/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-21**
Location ID: **NA**
Lab Sample ID: **21404300903**
Sample Type: **Site Sample**
Method: **EPA 6020A Dissolved**

Sample Matrix : **W**
Sample Date: **04/29/2014 12:41**
Analysis Date: **05/08/2014 3:25**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7429-90-5	Aluminum	1	20	29.2		29.2		ug/L	
7440-36-0	Antimony	1	2	0.5	U	0.5	U	ug/L	
7440-38-2	Arsenic	1	1	5.86		5.86		ug/L	
7440-39-3	Barium	1	1	28.3		28.3		ug/L	
7440-41-7	Beryllium	1	1	0.25	U	0.25	U	ug/L	
7440-43-9	Cadmium	1	1	0.25	U	0.25	U	ug/L	
7440-70-2	Calcium	50	25000	110000		110000		ug/L	
7440-47-3	Chromium	1	1	0.49	J	0.49	J	ug/L	
7440-48-4	Cobalt	1	1	0.25	U	0.25	U	ug/L	
7440-50-8	Copper	1	1	0.43	J	0.43	J	ug/L	
7439-89-6	Iron	1	100	25	U	25	U	ug/L	
7439-92-1	Lead	1	1	0.25	U	0.25	U	ug/L	
7439-95-4	Magnesium	50	5000	48100		48100		ug/L	
7439-96-5	Manganese	1	5	1.25	U	1.25	U	ug/L	
7439-98-7	Molybdenum	1	1	11.2		11.2		ug/L	
7440-02-0	Nickel	1	2	0.5	U	0.5	U	ug/L	
7440-09-7	Potassium	1	100	8510		8510		ug/L	
7782-49-2	Selenium	1	1	10.7		10.7		ug/L	
7440-22-4	Silver	1	1	0.25	U	0.25	UJ	ug/L	*
7440-23-5	Sodium	50	5000	163000		163000		ug/L	
7440-28-0	Thallium	1	1	0.25	U	0.25	U	ug/L	
7440-32-6	Titanium	1	1	0.64	J	0.64	J	ug/L	
7440-62-2	Vanadium	1	1	46.3		46.3		ug/L	
7440-66-6	Zinc	1	20	9.65	J	9.65	J	ug/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-22**
Location ID: **NA**
Lab Sample ID: **21404300904**
Sample Type: **Site Sample**
Method: **EPA 6020A Dissolved**

Sample Matrix : **W**
Sample Date: **04/30/2014 8:41**
Analysis Date: **05/08/2014 9:02**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7429-90-5	Aluminum	2	40	13.6	J	13.6	J	ug/L	
7440-36-0	Antimony	2	4	1	U	1	U	ug/L	
7440-38-2	Arsenic	2	2	0.5	U	0.5	U	ug/L	
7440-39-3	Barium	2	2	37		37		ug/L	
7440-41-7	Beryllium	2	2	0.5	U	0.5	U	ug/L	
7440-43-9	Cadmium	2	2	0.5	U	0.5	U	ug/L	
7440-70-2	Calcium	2	1000	50700		50700		ug/L	
7440-47-3	Chromium	2	2	0.5	U	0.5	U	ug/L	
7440-48-4	Cobalt	2	2	0.5	U	0.5	U	ug/L	
7440-50-8	Copper	2	2	0.5	U	0.5	U	ug/L	
7439-89-6	Iron	2	200	345		345		ug/L	
7439-92-1	Lead	2	2	0.5	U	0.5	U	ug/L	
7439-95-4	Magnesium	10	1000	20400		20400		ug/L	
7439-96-5	Manganese	2	10	148		148		ug/L	
7439-98-7	Molybdenum	2	2	12.8		12.8		ug/L	
7440-02-0	Nickel	2	4	1	U	1	U	ug/L	
7440-09-7	Potassium	2	200	3080		3080		ug/L	
7782-49-2	Selenium	2	2	0.84	J	0.84	J	ug/L	
7440-22-4	Silver	2	2	0.5	U	0.5	UJ	ug/L	*
7440-23-5	Sodium	50	5000	304000		304000		ug/L	
7440-28-0	Thallium	2	2	0.5	U	0.5	U	ug/L	
7440-32-6	Titanium	2	2	0.5	U	0.5	U	ug/L	
7440-62-2	Vanadium	2	2	0.5	U	0.5	U	ug/L	
7440-66-6	Zinc	2	40	10	U	10	U	ug/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-22-a**
Location ID: **NA**
Lab Sample ID: **21404300905**
Sample Type: **Field Duplicate**
Method: **EPA 6020A Dissolved**

Sample Matrix : **W**
Sample Date: **04/30/2014 8:41**
Analysis Date: **05/08/2014 9:12**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7429-90-5	Aluminum	2	40	13.6	J	13.6	J	ug/L	
7440-36-0	Antimony	2	4	1	U	1	U	ug/L	
7440-38-2	Arsenic	2	2	0.5	U	0.5	U	ug/L	
7440-39-3	Barium	2	2	36.9		36.9		ug/L	
7440-41-7	Beryllium	2	2	0.5	U	0.5	U	ug/L	
7440-43-9	Cadmium	2	2	0.5	U	0.5	U	ug/L	
7440-70-2	Calcium	2	1000	50700		50700		ug/L	
7440-47-3	Chromium	2	2	0.5	U	0.5	U	ug/L	
7440-48-4	Cobalt	2	2	0.5	U	0.5	U	ug/L	
7440-50-8	Copper	2	2	0.5	U	0.5	U	ug/L	
7439-89-6	Iron	2	200	345		345		ug/L	
7439-92-1	Lead	2	2	0.5	U	0.5	U	ug/L	
7439-95-4	Magnesium	10	1000	20700		20700		ug/L	
7439-96-5	Manganese	2	10	150		150		ug/L	
7439-98-7	Molybdenum	2	2	13.2		13.2		ug/L	
7440-02-0	Nickel	2	4	1	U	1	U	ug/L	
7440-09-7	Potassium	2	200	3090		3090		ug/L	
7782-49-2	Selenium	2	2	0.81	J	0.81	J	ug/L	
7440-22-4	Silver	2	2	0.5	U	0.5	UJ	ug/L	*
7440-23-5	Sodium	50	5000	309000		309000		ug/L	
7440-28-0	Thallium	2	2	0.5	U	0.5	U	ug/L	
7440-32-6	Titanium	2	2	0.5	U	0.5	U	ug/L	
7440-62-2	Vanadium	2	2	0.5	U	0.5	U	ug/L	
7440-66-6	Zinc	2	40	10	U	10	U	ug/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-2**
Location ID: **NA**
Lab Sample ID: **21404300906**
Sample Type: **Site Sample**
Method: **EPA 6020A Dissolved**

Sample Matrix : **W**
Sample Date: **04/30/2014 10:46**
Analysis Date: **05/08/2014 12:54**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7429-90-5	Aluminum	10	200	50	U	50	U	ug/L	
7440-36-0	Antimony	10	20	5	U	5	U	ug/L	
7440-38-2	Arsenic	10	10	2.5	U	2.5	U	ug/L	
7440-39-3	Barium	10	10	27.4		27.4		ug/L	
7440-41-7	Beryllium	10	10	2.5	U	2.5	U	ug/L	
7440-43-9	Cadmium	10	10	2.5	U	2.5	U	ug/L	
7440-70-2	Calcium	10	5000	236000		236000		ug/L	
7440-47-3	Chromium	10	10	2.5	U	2.5	U	ug/L	
7440-48-4	Cobalt	10	10	2.5	U	2.5	U	ug/L	
7440-50-8	Copper	10	10	2.5	U	2.5	U	ug/L	
7439-89-6	Iron	10	1000	250	U	250	U	ug/L	
7439-92-1	Lead	10	10	2.5	U	2.5	U	ug/L	
7439-95-4	Magnesium	500	50000	134000		134000		ug/L	
7439-96-5	Manganese	10	50	194		194		ug/L	
7439-98-7	Molybdenum	10	10	19.5		19.5		ug/L	
7440-02-0	Nickel	10	20	5	U	5	U	ug/L	
7440-09-7	Potassium	10	1000	8520		8520		ug/L	
7782-49-2	Selenium	10	10	4.22	J	4.22	J	ug/L	
7440-22-4	Silver	10	10	2.5	U	2.5	UJ	ug/L	*
7440-23-5	Sodium	500	50000	2200000		2200000		ug/L	
7440-28-0	Thallium	10	10	2.5	U	2.5	U	ug/L	
7440-32-6	Titanium	10	10	2.5	U	2.5	U	ug/L	
7440-62-2	Vanadium	10	10	2.5	U	2.5	U	ug/L	
7440-66-6	Zinc	10	200	440		440		ug/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-14**
Location ID: **NA**
Lab Sample ID: **21404300909**
Sample Type: **Site Sample**
Method: **EPA 6020A Dissolved**

Sample Matrix : **W**
Sample Date: **05/01/2014 7:51**
Analysis Date: **05/08/2014 22:53**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7429-90-5	Aluminum	5	100	25	U	25	U	ug/L
7440-36-0	Antimony	5	10	2.5	U	2.5	U	ug/L
7440-38-2	Arsenic	5	5	1.41	J	1.41	J	ug/L
7440-39-3	Barium	5	5	11.9		11.9		ug/L
7440-41-7	Beryllium	5	5	1.25	U	1.25	U	ug/L
7440-43-9	Cadmium	5	5	1.25	U	1.25	U	ug/L
7440-70-2	Calcium	5	2500	78200		78200		ug/L
7440-47-3	Chromium	5	5	1.25	U	1.25	U	ug/L
7440-48-4	Cobalt	5	5	1.25	U	1.25	U	ug/L
7440-50-8	Copper	5	5	1.25	U	1.25	U	ug/L
7439-89-6	Iron	5	500	125	U	125	U	ug/L
7439-92-1	Lead	5	5	1.25	U	1.25	U	ug/L
7439-95-4	Magnesium	100	10000	65300		65300		ug/L
7439-96-5	Manganese	5	25	6.25	U	6.25	U	ug/L
7439-98-7	Molybdenum	5	5	24.1		24.1		ug/L
7440-02-0	Nickel	5	10	14.3		14.3		ug/L
7440-09-7	Potassium	5	500	10800		10800		ug/L
7782-49-2	Selenium	5	5	24.1		24.1		ug/L
7440-22-4	Silver	5	5	1.25	U	1.25	U	ug/L
7440-23-5	Sodium	100	10000	726000		726000		ug/L
7440-28-0	Thallium	5	5	1.25	U	1.25	U	ug/L
7440-32-6	Titanium	5	5	1.25	U	1.25	U	ug/L
7440-62-2	Vanadium	5	5	5.95		5.95		ug/L
7440-66-6	Zinc	5	100	26.2	J	26.2	J	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-20**
Location ID: **NA**
Lab Sample ID: **21404300910**
Sample Type: **Site Sample**
Method: **EPA 6020A Dissolved**

Sample Matrix : **W**
Sample Date: **05/01/2014 10:16**
Analysis Date: **05/09/2014 0:09**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7429-90-5	Aluminum	20	400	100	U	100	U	ug/L
7440-36-0	Antimony	20	40	10	U	10	U	ug/L
7440-38-2	Arsenic	20	20	5	U	5	U	ug/L
7440-39-3	Barium	20	20	24.2		24.2		ug/L
7440-41-7	Beryllium	20	20	5	U	5	U	ug/L
7440-43-9	Cadmium	20	20	5	U	5	U	ug/L
7440-70-2	Calcium	20	10000	683000		683000		ug/L
7440-47-3	Chromium	20	20	5	U	5	U	ug/L
7440-48-4	Cobalt	20	20	5	U	5	U	ug/L
7440-50-8	Copper	20	20	5	U	5	U	ug/L
7439-89-6	Iron	20	2000	500	U	500	U	ug/L
7439-92-1	Lead	20	20	5	U	5	U	ug/L
7439-95-4	Magnesium	500	50000	348000		348000		ug/L
7439-96-5	Manganese	20	100	888		888		ug/L
7439-98-7	Molybdenum	20	20	12.6	J	12.6	J	ug/L
7440-02-0	Nickel	20	40	10	U	10	U	ug/L
7440-09-7	Potassium	20	2000	11500		11500		ug/L
7782-49-2	Selenium	20	20	5	U	5	U	ug/L
7440-22-4	Silver	20	20	5	U	5	U	ug/L
7440-23-5	Sodium	500	50000	3120000		3120000		ug/L
7440-28-0	Thallium	20	20	5	U	5	U	ug/L
7440-32-6	Titanium	20	20	5	U	5	U	ug/L
7440-62-2	Vanadium	20	20	5	U	5	U	ug/L
7440-66-6	Zinc	20	400	462		462		ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-19**
Location ID: **NA**
Lab Sample ID: **21404300901**
Sample Type: **Site Sample**
Method: **EPA 6020A**

Sample Matrix : **W**
Sample Date: **04/29/2014 8:41**
Analysis Date: **05/08/2014 9:22**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7429-90-5	Aluminum	5	100	44.4	J	44.4	J	ug/L	
7440-36-0	Antimony	5	10	3.44	J	3.44	J	ug/L	
7440-38-2	Arsenic	5	5	1.25	U	1.25	U	ug/L	
7440-39-3	Barium	5	5	42.3		42.3		ug/L	
7440-41-7	Beryllium	5	5	1.25	U	1.25	U	ug/L	
7440-43-9	Cadmium	5	5	1.25	U	1.25	U	ug/L	
7440-70-2	Calcium	250	125000	346000		346000		ug/L	
7440-47-3	Chromium	5	5	22.6		22.6		ug/L	
7440-48-4	Cobalt	5	5	1.25	U	1.25	U	ug/L	
7440-50-8	Copper	5	5	1.25	U	1.25	UJ	ug/L	*
7439-89-6	Iron	5	500	1360		1360		ug/L	
7439-92-1	Lead	5	5	120		120	J	ug/L	*
7439-95-4	Magnesium	250	25000	185000		185000		ug/L	
7439-96-5	Manganese	5	25	383		383		ug/L	
7439-98-7	Molybdenum	5	5	4.33	J	4.33	J	ug/L	
7440-02-0	Nickel	5	10	2.5	U	2.5	U	ug/L	
7440-09-7	Potassium	5	500	9450		9450		ug/L	
7782-49-2	Selenium	5	5	2.13	J	2.13	J	ug/L	
7440-22-4	Silver	5	5	1.25	U	1.25	U	ug/L	
7440-23-5	Sodium	250	25000	1070000		1070000		ug/L	
7440-28-0	Thallium	5	5	1.25	U	1.25	U	ug/L	
7440-32-6	Titanium	5	5	1.35	J	1.35	J	ug/L	
7440-62-2	Vanadium	5	5	1.25	U	1.25	U	ug/L	
7440-66-6	Zinc	5	100	84.4	J	84.4	J	ug/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-18**
Location ID: **NA**
Lab Sample ID: **21404300902**
Sample Type: **Site Sample**
Method: **EPA 6020A**

Sample Matrix : **W**
Sample Date: **04/29/2014 9:31**
Analysis Date: **05/06/2014 23:32**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7429-90-5	Aluminum	1	20	134		134		ug/L	
7440-36-0	Antimony	1	2	0.5	U	0.5	U	ug/L	
7440-38-2	Arsenic	1	1	7.02		7.02		ug/L	
7440-39-3	Barium	1	1	34.1		34.1		ug/L	
7440-41-7	Beryllium	1	1	0.25	U	0.25	U	ug/L	
7440-43-9	Cadmium	1	1	0.25	U	0.25	U	ug/L	
7440-70-2	Calcium	1	500	46800		46800		ug/L	
7440-47-3	Chromium	1	1	0.75	J	0.75	J	ug/L	
7440-48-4	Cobalt	1	1	0.25	U	0.25	U	ug/L	
7440-50-8	Copper	1	1	0.68	J	0.68	J	ug/L	
7439-89-6	Iron	1	100	74.6	J	74.6	J	ug/L	
7439-92-1	Lead	1	1	0.25	U	0.25	UJ	ug/L	*
7439-95-4	Magnesium	10	1000	19900		19900		ug/L	
7439-96-5	Manganese	1	5	2.7	J	2.7	J	ug/L	
7439-98-7	Molybdenum	1	1	4.52		4.52		ug/L	
7440-02-0	Nickel	1	2	0.5	U	0.5	U	ug/L	
7440-09-7	Potassium	1	100	2700		2700		ug/L	
7782-49-2	Selenium	1	1	2.41		2.41		ug/L	
7440-22-4	Silver	1	1	0.25	U	0.25	U	ug/L	
7440-23-5	Sodium	10	1000	65800		65800		ug/L	
7440-28-0	Thallium	1	1	0.25	U	0.25	U	ug/L	
7440-32-6	Titanium	1	1	1.56		1.56		ug/L	
7440-62-2	Vanadium	1	1	56.3		56.3		ug/L	
7440-66-6	Zinc	1	20	9.73	J	9.73	J	ug/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-21**
Location ID: **NA**
Lab Sample ID: **21404300903**
Sample Type: **Site Sample**
Method: **EPA 6020A**

Sample Matrix : **W**
Sample Date: **04/29/2014 12:41**
Analysis Date: **05/06/2014 23:41**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7429-90-5	Aluminum	1	20	1080		1080		ug/L	
7440-36-0	Antimony	1	2	0.5	U	0.5	U	ug/L	
7440-38-2	Arsenic	1	1	4.93		4.93		ug/L	
7440-39-3	Barium	1	1	33.8		33.8		ug/L	
7440-41-7	Beryllium	1	1	0.25	U	0.25	U	ug/L	
7440-43-9	Cadmium	1	1	0.25	U	0.25	U	ug/L	
7440-70-2	Calcium	50	25000	95200		95200		ug/L	
7440-47-3	Chromium	1	1	1.13		1.13		ug/L	
7440-48-4	Cobalt	1	1	0.36	J	0.36	J	ug/L	
7440-50-8	Copper	1	1	0.82	J	0.82	J	ug/L	
7439-89-6	Iron	1	100	563		563		ug/L	
7439-92-1	Lead	1	1	0.87	J	0.87	J	ug/L	
7439-95-4	Magnesium	50	5000	41600		41600		ug/L	
7439-96-5	Manganese	1	5	15.3		15.3		ug/L	
7439-98-7	Molybdenum	1	1	9.79		9.79		ug/L	
7440-02-0	Nickel	1	2	0.71	J	2	U	ug/L	*
7440-09-7	Potassium	1	100	7600		7600		ug/L	
7782-49-2	Selenium	1	1	8.19		8.19		ug/L	
7440-22-4	Silver	1	1	0.25	U	0.25	U	ug/L	
7440-23-5	Sodium	50	5000	143000		143000		ug/L	
7440-28-0	Thallium	1	1	0.25	U	0.25	U	ug/L	
7440-32-6	Titanium	1	1	13.4		13.4		ug/L	
7440-62-2	Vanadium	1	1	42.2		42.2		ug/L	
7440-66-6	Zinc	1	20	79.2		79.2		ug/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-22**
Location ID: **NA**
Lab Sample ID: **21404300904**
Sample Type: **Site Sample**
Method: **EPA 6020A**

Sample Matrix : **W**
Sample Date: **04/30/2014 8:41**
Analysis Date: **05/08/2014 4:32**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7429-90-5	Aluminum	2	40	18.3	J	18.3	J	ug/L	
7440-36-0	Antimony	2	4	1	U	1	U	ug/L	
7440-38-2	Arsenic	2	2	0.5	U	0.5	U	ug/L	
7440-39-3	Barium	2	2	36.5		36.5		ug/L	
7440-41-7	Beryllium	2	2	0.5	U	0.5	U	ug/L	
7440-43-9	Cadmium	2	2	0.5	U	0.5	U	ug/L	
7440-70-2	Calcium	2	1000	51100		51100		ug/L	
7440-47-3	Chromium	2	2	0.5	U	0.5	U	ug/L	
7440-48-4	Cobalt	2	2	0.5	U	0.5	U	ug/L	
7440-50-8	Copper	2	2	0.59	J	0.59	J	ug/L	
7439-89-6	Iron	2	200	351		351		ug/L	
7439-92-1	Lead	2	2	0.5	U	0.5	U	ug/L	
7439-95-4	Magnesium	10	1000	21800		21800		ug/L	
7439-96-5	Manganese	2	10	152		152		ug/L	
7439-98-7	Molybdenum	2	2	13.2		13.2		ug/L	
7440-02-0	Nickel	2	4	1	U	1	U	ug/L	
7440-09-7	Potassium	2	200	3130		3130		ug/L	
7782-49-2	Selenium	2	2	0.71	J	2	U	ug/L	*
7440-22-4	Silver	2	2	0.5	U	0.5	UJ	ug/L	*
7440-23-5	Sodium	50	5000	338000		338000		ug/L	
7440-28-0	Thallium	2	2	0.5	U	0.5	U	ug/L	
7440-32-6	Titanium	2	2	0.5	U	0.5	U	ug/L	
7440-62-2	Vanadium	2	2	0.5	U	0.5	U	ug/L	
7440-66-6	Zinc	2	40	10	U	10	U	ug/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-22-a**
Location ID: **NA**
Lab Sample ID: **21404300905**
Sample Type: **Field Duplicate**
Method: **EPA 6020A**

Sample Matrix : **W**
Sample Date: **04/30/2014 8:41**
Analysis Date: **05/08/2014 4:52**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7429-90-5	Aluminum	2	40	20.2	J	20.2	J	ug/L	
7440-36-0	Antimony	2	4	1	U	1	U	ug/L	
7440-38-2	Arsenic	2	2	0.5	U	0.5	U	ug/L	
7440-39-3	Barium	2	2	37.3		37.3		ug/L	
7440-41-7	Beryllium	2	2	0.5	U	0.5	U	ug/L	
7440-43-9	Cadmium	2	2	0.5	U	0.5	U	ug/L	
7440-70-2	Calcium	2	1000	51500		51500		ug/L	
7440-47-3	Chromium	2	2	0.5	U	0.5	U	ug/L	
7440-48-4	Cobalt	2	2	0.5	U	0.5	U	ug/L	
7440-50-8	Copper	2	2	0.5	U	0.5	U	ug/L	
7439-89-6	Iron	2	200	368		368		ug/L	
7439-92-1	Lead	2	2	0.5	U	0.5	U	ug/L	
7439-95-4	Magnesium	10	1000	21400		21400		ug/L	
7439-96-5	Manganese	2	10	152		152		ug/L	
7439-98-7	Molybdenum	2	2	13.1		13.1		ug/L	
7440-02-0	Nickel	2	4	1	U	1	U	ug/L	
7440-09-7	Potassium	2	200	3140		3140		ug/L	
7782-49-2	Selenium	2	2	0.78	J	2	U	ug/L	*
7440-22-4	Silver	2	2	0.5	U	0.5	UJ	ug/L	*
7440-23-5	Sodium	50	5000	358000		358000		ug/L	
7440-28-0	Thallium	2	2	0.5	U	0.5	U	ug/L	
7440-32-6	Titanium	2	2	0.5	U	0.5	U	ug/L	
7440-62-2	Vanadium	2	2	0.5	U	0.5	U	ug/L	
7440-66-6	Zinc	2	40	10	U	10	U	ug/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-2**
Location ID: **NA**
Lab Sample ID: **21404300906**
Sample Type: **Site Sample**
Method: **EPA 6020A**

Sample Matrix : **W**
Sample Date: **04/30/2014 10:46**
Analysis Date: **05/08/2014 6:28**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7429-90-5	Aluminum	10	200	50	U	50	U	ug/L	
7440-36-0	Antimony	10	20	5	U	5	U	ug/L	
7440-38-2	Arsenic	10	10	2.5	U	2.5	U	ug/L	
7440-39-3	Barium	10	10	27.4		27.4		ug/L	
7440-41-7	Beryllium	10	10	2.5	U	2.5	U	ug/L	
7440-43-9	Cadmium	10	10	2.5	U	2.5	U	ug/L	
7440-70-2	Calcium	10	5000	238000		238000		ug/L	
7440-47-3	Chromium	10	10	2.5	U	2.5	U	ug/L	
7440-48-4	Cobalt	10	10	2.5	U	2.5	U	ug/L	
7440-50-8	Copper	10	10	2.5	U	2.5	U	ug/L	
7439-89-6	Iron	10	1000	250	U	250	U	ug/L	
7439-92-1	Lead	10	10	2.5	U	2.5	U	ug/L	
7439-95-4	Magnesium	500	50000	132000		132000		ug/L	
7439-96-5	Manganese	10	50	194		194		ug/L	
7439-98-7	Molybdenum	10	10	20.5		20.5		ug/L	
7440-02-0	Nickel	10	20	5	U	5	U	ug/L	
7440-09-7	Potassium	10	1000	8560		8560		ug/L	
7782-49-2	Selenium	10	10	3.39	J	10	U	ug/L	*
7440-22-4	Silver	10	10	2.5	U	2.5	UJ	ug/L	*
7440-23-5	Sodium	500	50000	2190000		2190000		ug/L	
7440-28-0	Thallium	10	10	2.5	U	2.5	U	ug/L	
7440-32-6	Titanium	10	10	2.5	U	2.5	U	ug/L	
7440-62-2	Vanadium	10	10	2.5	U	2.5	U	ug/L	
7440-66-6	Zinc	10	200	442		442		ug/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-14**
Location ID: **NA**
Lab Sample ID: **21404300909**
Sample Type: **Site Sample**
Method: **EPA 6020A**

Sample Matrix : **W**
Sample Date: **05/01/2014 7:51**
Analysis Date: **05/09/2014 0:57**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7429-90-5	Aluminum	5	100	26.6	J	26.6	J	ug/L
7440-36-0	Antimony	5	10	2.5	U	2.5	U	ug/L
7440-38-2	Arsenic	5	5	1.42	J	1.42	J	ug/L
7440-39-3	Barium	5	5	13.4		13.4		ug/L
7440-41-7	Beryllium	5	5	1.25	U	1.25	U	ug/L
7440-43-9	Cadmium	5	5	1.25	U	1.25	U	ug/L
7440-70-2	Calcium	5	2500	85200		85200		ug/L
7440-47-3	Chromium	5	5	1.25	U	1.25	U	ug/L
7440-48-4	Cobalt	5	5	1.25	U	1.25	U	ug/L
7440-50-8	Copper	5	5	1.25	U	1.25	U	ug/L
7439-89-6	Iron	5	500	125	U	125	U	ug/L
7439-92-1	Lead	5	5	1.25	U	1.25	U	ug/L
7439-95-4	Magnesium	100	10000	70400		70400		ug/L
7439-96-5	Manganese	5	25	6.25	U	6.25	U	ug/L
7439-98-7	Molybdenum	5	5	26.6		26.6		ug/L
7440-02-0	Nickel	5	10	15.6		15.6		ug/L
7440-09-7	Potassium	5	500	11800		11800		ug/L
7782-49-2	Selenium	5	5	25.1		25.1		ug/L
7440-22-4	Silver	5	5	1.25	U	1.25	U	ug/L
7440-23-5	Sodium	100	10000	784000		784000		ug/L
7440-28-0	Thallium	5	5	1.25	U	1.25	U	ug/L
7440-32-6	Titanium	5	5	1.25	U	1.25	U	ug/L
7440-62-2	Vanadium	5	5	6.57		6.57		ug/L
7440-66-6	Zinc	5	100	27.7	J	27.7	J	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-20**
Location ID: **NA**
Lab Sample ID: **21404300910**
Sample Type: **Site Sample**
Method: **EPA 6020A**

Sample Matrix : **W**
Sample Date: **05/01/2014 10:16**
Analysis Date: **05/09/2014 1:16**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7429-90-5	Aluminum	20	400	118	J	118	J	ug/L
7440-36-0	Antimony	20	40	10	U	10	U	ug/L
7440-38-2	Arsenic	20	20	5	U	5	U	ug/L
7440-39-3	Barium	20	20	28.7		28.7		ug/L
7440-41-7	Beryllium	20	20	5	U	5	U	ug/L
7440-43-9	Cadmium	20	20	5	U	5	U	ug/L
7440-70-2	Calcium	20	10000	752000		752000		ug/L
7440-47-3	Chromium	20	20	5	U	5	U	ug/L
7440-48-4	Cobalt	20	20	5	U	5	U	ug/L
7440-50-8	Copper	20	20	5	U	5	U	ug/L
7439-89-6	Iron	20	2000	500	U	500	U	ug/L
7439-92-1	Lead	20	20	5	U	5	U	ug/L
7439-95-4	Magnesium	500	50000	383000		383000		ug/L
7439-96-5	Manganese	20	100	975		975		ug/L
7439-98-7	Molybdenum	20	20	13	J	13	J	ug/L
7440-02-0	Nickel	20	40	10	U	10	U	ug/L
7440-09-7	Potassium	20	2000	12800		12800		ug/L
7782-49-2	Selenium	20	20	5	U	5	U	ug/L
7440-22-4	Silver	20	20	5	U	5	U	ug/L
7440-23-5	Sodium	500	50000	3440000		3440000		ug/L
7440-28-0	Thallium	20	20	5	U	5	U	ug/L
7440-32-6	Titanium	20	20	5	U	5	U	ug/L
7440-62-2	Vanadium	20	20	5	U	5	U	ug/L
7440-66-6	Zinc	20	400	518		518		ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-19**
Location ID: **NA**
Lab Sample ID: **21404300901**
Sample Type: **Site Sample**
Method: **EPA 7470A Dissolved**

Sample Matrix : **W**
Sample Date: **04/29/2014 8:41**
Analysis Date: **05/01/2014 16:21**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7439-97-6	Mercury	1	0.2	0.07	U	0.07	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-18**
Location ID: **NA**
Lab Sample ID: **21404300902**
Sample Type: **Site Sample**
Method: **EPA 7470A Dissolved**

Sample Matrix : **W**
Sample Date: **04/29/2014 9:31**
Analysis Date: **05/01/2014 16:35**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7439-97-6	Mercury	1	0.2	0.07	U	0.07	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-21**
Location ID: **NA**
Lab Sample ID: **21404300903**
Sample Type: **Site Sample**
Method: **EPA 7470A Dissolved**

Sample Matrix : **W**
Sample Date: **04/29/2014 12:41**
Analysis Date: **05/01/2014 16:38**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7439-97-6	Mercury	1	0.2	0.07	U	0.07	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-22**
Location ID: **NA**
Lab Sample ID: **21404300904**
Sample Type: **Site Sample**
Method: **EPA 7470A Dissolved**

Sample Matrix : **W**
Sample Date: **04/30/2014 8:41**
Analysis Date: **05/03/2014 17:03**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7439-97-6	Mercury	1	0.2	0.07	U	0.07	UJ	ug/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-22-a**
Location ID: **NA**
Lab Sample ID: **21404300905**
Sample Type: **Field Duplicate**
Method: **EPA 7470A Dissolved**

Sample Matrix : **W**
Sample Date: **04/30/2014 8:41**
Analysis Date: **05/03/2014 17:05**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7439-97-6	Mercury	1	0.2	0.07	U	0.07	UJ	ug/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-2**
Location ID: **NA**
Lab Sample ID: **21404300906**
Sample Type: **Site Sample**
Method: **EPA 7470A Dissolved**

Sample Matrix : **W**
Sample Date: **04/30/2014 10:46**
Analysis Date: **05/03/2014 16:58**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7439-97-6	Mercury	1	0.2	0.07	U	0.07	UJ	ug/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-14**
Location ID: **NA**
Lab Sample ID: **21404300909**
Sample Type: **Site Sample**
Method: **EPA 7470A Dissolved**

Sample Matrix : **W**
Sample Date: **05/01/2014 7:51**
Analysis Date: **05/06/2014 13:29**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7439-97-6	Mercury	1	0.2	0.07	U	0.07	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-20**
Location ID: **NA**
Lab Sample ID: **21404300910**
Sample Type: **Site Sample**
Method: **EPA 7470A Dissolved**

Sample Matrix : **W**
Sample Date: **05/01/2014 10:16**
Analysis Date: **05/06/2014 13:32**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7439-97-6	Mercury	1	0.2	0.07	U	0.07	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-19**
Location ID: **NA**
Lab Sample ID: **21404300901**
Sample Type: **Site Sample**
Method: **EPA 7470A**

Sample Matrix : **W**
Sample Date: **04/29/2014 8:41**
Analysis Date: **05/01/2014 16:19**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7439-97-6	Mercury	1	0.2	0.07	U	0.07	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-18**
Location ID: **NA**
Lab Sample ID: **21404300902**
Sample Type: **Site Sample**
Method: **EPA 7470A**

Sample Matrix : **W**
Sample Date: **04/29/2014 9:31**
Analysis Date: **05/01/2014 16:22**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7439-97-6	Mercury	1	0.2	0.07	U	0.07	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-21**
Location ID: **NA**
Lab Sample ID: **21404300903**
Sample Type: **Site Sample**
Method: **EPA 7470A**

Sample Matrix : **W**
Sample Date: **04/29/2014 12:41**
Analysis Date: **05/01/2014 16:36**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7439-97-6	Mercury	1	0.2	0.07	U	0.07	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-22**
Location ID: **NA**
Lab Sample ID: **21404300904**
Sample Type: **Site Sample**
Method: **EPA 7470A**

Sample Matrix : **W**
Sample Date: **04/30/2014 8:41**
Analysis Date: **05/03/2014 16:51**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7439-97-6	Mercury	1	0.2	0.07	U	0.07	UJ	ug/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-22-a**
Location ID: **NA**
Lab Sample ID: **21404300905**
Sample Type: **Field Duplicate**
Method: **EPA 7470A**

Sample Matrix : **W**
Sample Date: **04/30/2014 8:41**
Analysis Date: **05/03/2014 16:56**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7439-97-6	Mercury	1	0.2	0.07	U	0.07	UJ	ug/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-2**
Location ID: **NA**
Lab Sample ID: **21404300906**
Sample Type: **Site Sample**
Method: **EPA 7470A**

Sample Matrix : **W**
Sample Date: **04/30/2014 10:46**
Analysis Date: **05/03/2014 16:45**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7439-97-6	Mercury	1	0.2	0.07	U	0.07	UJ	ug/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-14**
Location ID: **NA**
Lab Sample ID: **21404300909**
Sample Type: **Site Sample**
Method: **EPA 7470A**

Sample Matrix : **W**
Sample Date: **05/01/2014 7:51**
Analysis Date: **05/06/2014 13:27**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7439-97-6	Mercury	1	0.2	0.07	U	0.07	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-20**
Location ID: **NA**
Lab Sample ID: **21404300910**
Sample Type: **Site Sample**
Method: **EPA 7470A**

Sample Matrix : **W**
Sample Date: **05/01/2014 10:16**
Analysis Date: **05/06/2014 13:31**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7439-97-6	Mercury	1	0.2	0.07	U	0.07	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-19** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **1405047-01** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: SW6860										
Perchlorate	04/29/2014 8:41	05/13/2014 22:20	1	0.0003	0.0001	UN	0.0001	U	ug/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-18** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **1405047-02** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: SW6860										
Perchlorate	04/29/2014 9:31	05/13/2014 22:36	1	0.0003	0.00283	N	0.00283		ug/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-21** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **1405047-03** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: SW6860										
Perchlorate	04/29/2014 12:41	05/13/2014 22:52	1	0.0003	0.00559	N	0.00559		ug/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-22** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **1405047-04** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: SW6860										
Perchlorate	04/30/2014 8:41	05/13/2014 23:08	1	0.0003	0.0001	UN	0.0001	U	ug/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-22-a** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **1405047-05** Lab Code: **GCAL**

Sample Type: **Field Duplicate**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: SW6860										
Perchlorate	04/30/2014 8:41	05/13/2014 23:24	1	0.0003	0.0001	UN	0.0001	U	ug/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-2** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **1405047-06** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: SW6860										
Perchlorate	04/30/2014 10:46	05/14/2014 12:33	1	0.0003	0.0001	UN	0.0001	U	ug/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-14** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **1405047-07** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: SW6860										
Perchlorate	05/01/2014 7:51	05/14/2014 0:29	1	0.0003	0.0026	N	0.0026		ug/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-20** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **1405047-08** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: SW6860										
Perchlorate	05/01/2014 10:16	05/14/2014 0:45	1	0.0003	0.0001	UN	0.0001	U	ug/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-19** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **21404300901** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: EPA 300.0										
Chloride	04/29/2014 8:41	05/03/2014 16:20	1000	200	1850		1850		mg/L	
Sulfate	04/29/2014 8:41	05/03/2014 16:20	1000	200	1350		1350		mg/L	
Method: EPA 353.2 Nitrate										
Nitrate	04/29/2014 8:41	04/30/2014 11:59	1	0.01	0.008	U	0.008	UJ	mg/L-N	*
Method: EPA 353.2 Nitrite										
Nitrite	04/29/2014 8:41	04/30/2014 12:34	1	0.01	0.006	J	0.006	J	mg/L-N	
Method: EPA 9012B										
Cyanide	04/29/2014 8:41	05/04/2014 11:16	1	0.005	0.0017	J	0.0017	J	mg/L	
Method: SM 2320 B										
Total Alkalinity	04/29/2014 8:41	05/02/2014 13:28	1	1	399		399		mg/L	
Method: SM 2540 C										
Total Dissolved Solids(TDS)	04/29/2014 8:41	05/01/2014 15:49	1	10	4070		4070		mg/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-18** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **21404300902** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: EPA 300.0										
Chloride	04/29/2014 9:31	05/03/2014 16:38	50	10	37.6		37.6		mg/L	
Sulfate	04/29/2014 9:31	05/03/2014 16:38	50	10	116		116		mg/L	
Method: EPA 353.2 Nitrate										
Nitrate	04/29/2014 9:31	04/30/2014 12:00	1	0.01	0.298		0.298	J	mg/L-N	*
Method: EPA 353.2 Nitrite										
Nitrite	04/29/2014 9:31	04/30/2014 12:35	1	0.01	0.006	U	0.006	U	mg/L-N	
Method: EPA 9012B										
Cyanide	04/29/2014 9:31	05/04/2014 11:17	1	0.005	0.0022	J	0.0022	J	mg/L	
Method: SM 2320 B										
Total Alkalinity	04/29/2014 9:31	05/02/2014 13:28	1	1	172		172		mg/L	
Method: SM 2540 C										
Total Dissolved Solids(TDS)	04/29/2014 9:31	05/01/2014 15:49	1	10	364		364		mg/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-21** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **21404300903** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: EPA 300.0										
Chloride	04/29/2014 12:41	05/03/2014 16:55	100	20	113		113		mg/L	
Sulfate	04/29/2014 12:41	05/03/2014 16:55	100	20	424		424		mg/L	
Method: EPA 353.2 Nitrate										
Nitrate	04/29/2014 12:41	04/30/2014 12:06	5	0.05	1.47		1.47	J	mg/L-N	*
Method: EPA 353.2 Nitrite										
Nitrite	04/29/2014 12:41	04/30/2014 12:36	1	0.01	0.006	U	0.006	U	mg/L-N	
Method: EPA 9012B										
Cyanide	04/29/2014 12:41	05/04/2014 11:18	1	0.005	0.0031	J	0.0031	J	mg/L	
Method: SM 2320 B										
Total Alkalinity	04/29/2014 12:41	05/02/2014 13:28	1	1	236		236		mg/L	
Method: SM 2540 C										
Total Dissolved Solids(TDS)	04/29/2014 12:41	05/01/2014 15:49	1	10	970		970		mg/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-22** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **21404300904** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: EPA 300.0										
Chloride	04/30/2014 8:41	05/03/2014 18:59	100	20	388		388		mg/L	
Sulfate	04/30/2014 8:41	05/03/2014 18:59	100	20	242		242		mg/L	
Method: EPA 353.2 Nitrate										
Nitrate	04/30/2014 8:41	05/01/2014 15:56	1	0.01	0.008	U	0.008	UJ	mg/L-N	*
Method: EPA 353.2 Nitrite										
Nitrite	04/30/2014 8:41	05/01/2014 16:12	1	0.01	0.006	U	0.006	U	mg/L-N	
Method: EPA 9012B										
Cyanide	04/30/2014 8:41	05/04/2014 11:19	1	0.005	0.0008	J	0.0008	J	mg/L	
Method: SM 2320 B										
Total Alkalinity	04/30/2014 8:41	05/02/2014 13:28	1	1	177		177		mg/L	
Method: SM 2540 C										
Total Dissolved Solids(TDS)	04/30/2014 8:41	05/01/2014 15:49	1	10	920		920		mg/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-22-a** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **21404300905** Lab Code: **GCAL**

Sample Type: **Field Duplicate**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: EPA 300.0										
Chloride	04/30/2014 8:41	05/03/2014 19:51	100	20	381		381		mg/L	
Sulfate	04/30/2014 8:41	05/03/2014 19:51	100	20	240		240		mg/L	
Method: EPA 353.2 Nitrate										
Nitrate	04/30/2014 8:41	05/01/2014 15:57	1	0.01	0.008	U	0.008	UJ	mg/L-N	*
Method: EPA 353.2 Nitrite										
Nitrite	04/30/2014 8:41	05/01/2014 16:13	1	0.01	0.006	U	0.006	U	mg/L-N	
Method: EPA 9012B										
Cyanide	04/30/2014 8:41	05/04/2014 11:19	1	0.005	0.0034	J	0.0034	J	mg/L	
Method: SM 2320 B										
Total Alkalinity	04/30/2014 8:41	05/02/2014 13:28	1	1	178		178		mg/L	
Method: SM 2540 C										
Total Dissolved Solids(TDS)	04/30/2014 8:41	05/01/2014 15:49	1	10	1060		1060		mg/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-2** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **21404300906** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: EPA 300.0										
Chloride	04/30/2014 10:46	05/03/2014 20:09	2000	400	3440		3440		mg/L	
Sulfate	04/30/2014 10:46	05/03/2014 20:09	2000	400	1430		1430		mg/L	
Method: EPA 353.2 Nitrate										
Nitrate	04/30/2014 10:46	05/01/2014 15:58	1	0.01	0.157		0.157	J	mg/L-N	*
Method: EPA 353.2 Nitrite										
Nitrite	04/30/2014 10:46	05/01/2014 16:14	1	0.01	0.006	U	0.006	U	mg/L-N	
Method: EPA 9012B										
Cyanide	04/30/2014 10:46	05/04/2014 11:20	1	0.005	0.004	J	0.004	J	mg/L	
Method: SM 2320 B										
Total Alkalinity	04/30/2014 10:46	05/02/2014 13:28	1	1	95.9		95.9		mg/L	
Method: SM 2540 C										
Total Dissolved Solids(TDS)	04/30/2014 10:46	05/01/2014 15:49	1	10	6500		6500		mg/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-14** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **21404300909** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: EPA 300.0										
Chloride	05/01/2014 7:51	05/04/2014 21:58	1000	200	686		686		mg/L	
Sulfate	05/01/2014 7:51	05/04/2014 21:58	1000	200	1030		1030		mg/L	
Method: EPA 353.2 Nitrate										
Nitrate	05/01/2014 7:51	05/02/2014 17:34	5	0.05	1.29		1.29	J	mg/L-N	*
Method: EPA 353.2 Nitrite										
Nitrite	05/01/2014 7:51	05/02/2014 17:55	1	0.01	0.006	U	0.006	U	mg/L-N	
Method: EPA 9012B										
Cyanide	05/01/2014 7:51	05/04/2014 11:38	1	0.005	0.0029	J	0.0029	J	mg/L	
Method: SM 2320 B										
Total Alkalinity	05/01/2014 7:51	05/08/2014 10:33	1	1	155		155		mg/L	
Method: SM 2540 C										
Total Dissolved Solids(TDS)	05/01/2014 7:51	05/05/2014 15:50	1	10	2720		2720		mg/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-20** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **21404300910** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: EPA 300.0										
Chloride	05/01/2014 10:16	05/04/2014 22:15	2000	400	6260		6260		mg/L	
Sulfate	05/01/2014 10:16	05/04/2014 22:15	2000	400	1840		1840		mg/L	
Method: EPA 353.2 Nitrate										
Nitrate	05/01/2014 10:16	05/02/2014 17:35	1	0.01	0.03		0.03	J	mg/L-N	*
Method: EPA 353.2 Nitrite										
Nitrite	05/01/2014 10:16	05/02/2014 17:56	1	0.01	0.022		0.022		mg/L-N	
Method: EPA 9012B										
Cyanide	05/01/2014 10:16	05/04/2014 11:39	1	0.005	0.0032	J	0.0032	J	mg/L	
Method: SM 2320 B										
Total Alkalinity	05/01/2014 10:16	05/08/2014 10:33	1	1	76.3		76.3		mg/L	
Method: SM 2540 C										
Total Dissolved Solids(TDS)	05/01/2014 10:16	05/05/2014 15:50	1	10	9870		9870		mg/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-19** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **R1403127-001** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: EPA 218.6									
Hexavalent Chromium, Dissolved	04/29/2014 8:41	05/05/2014 16:16	1	0.02	0.126		0.126		ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-18** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **R1403127-002** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: EPA 218.6									
Hexavalent Chromium, Dissolved	04/29/2014 9:31	05/05/2014 16:25	1	0.02	0.652		0.652		ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-21** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **R1403127-003** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: EPA 218.6									
Hexavalent Chromium, Dissolved	04/29/2014 12:41	05/05/2014 16:33	1	0.02	0.479		0.479		ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-22** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **R1403127-004** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: EPA 218.6									
Hexavalent Chromium, Dissolved	04/30/2014 8:41	05/05/2014 17:06	1	0.02	0.028		0.028		ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-22-a** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **R1403127-005** Lab Code: **GCAL**

Sample Type: **Field Duplicate**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: EPA 218.6									
Hexavalent Chromium, Dissolved	04/30/2014 8:41	05/05/2014 17:14	1	0.02	0.02	U	0.02	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-2** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **R1403127-006** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: EPA 218.6									
Hexavalent Chromium, Dissolved	04/30/2014 10:46	05/05/2014 17:23	1	0.02	0.02	U	0.02	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-14** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **R1403127-007** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: EPA 218.6									
Hexavalent Chromium, Dissolved	05/01/2014 7:51	05/05/2014 17:48	1	0.02	0.509		0.509		ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Annual

SDG: 14043009

COC Sample ID: **MWQ-20** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **R1403127-008** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: EPA 218.6									
Hexavalent Chromium, Dissolved	05/01/2014 10:16	05/05/2014 17:56	1	0.02	0.02	U	0.02	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Appendix II
Chain of Custody

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Project Number: A012-108

Chain of Custody Number (1): 14042901

Project Name / Site Name: Melrose 2014 Annual	
Facility: Melrose Air Force Range	
Client Name: USACE ABQ	
Project Manager: Jonathan Kramer	
Collected by: Benjamin Stewart (251)709-6509	

Turn Around Time

24 Hour	☐
7 Day	☐
Standard	X
Other	☐

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	Sample Code (2)	Sample Number (3)	Sample Matrix (4)	Sample Method (5)	Number of Containers	Total and Dissolved Metals 6020A	Cyanide 9012A	Nitrate, Nitrite 300.0	Chloride, Sulfate 300.0	Perchlorate 6860	Alkalinity 2320B	TDS 2540C	Thallium Total and Dissolved 6020A	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID (Alphabetical Notation)
									5	2	4	1	1	1	2	4	2				
MWQ-19		29042014	0841		N	1	WG		5	X	X	X	X	X	X	X	X				A
MWQ-18		29042014	0931		N	1	WG		5	X	X	X	X	X	X	X	X				A
MWQ-21		29042014	1241		N	1	WG		5	X	X	X	X	X	X	X	X				A
				-																	
				-																	
				-																	
				-																	

Client ID: 4747 - TRINITY Analysis & Development Corp.
SDG: 214043009
Due Date: 05/07/14

Dissolved metals were field filtered.

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time		Received by (Signed)	Date	Time
1.		4/29/14	1539	1.	FedEx	4/29/14	1530
2.	FedEx	4/30/14	1000	2.	E Burow	4/30/14	1000
3.				3.			

Delivered Directly to Lab:	No	Shipped: No.:	1
Method of Shipment:	Fedex	Airbill Number:	
Analytical Lab:	GCAL	Delivery Location:	Baton Rouge, LA
Lab Recipient:		Delivery Date/Time:	

1.) Chain of Custody Number = site name (e.g., SS-125) and then date (yymmdd) collected + custody number (e.g. **SS1251207201**)...July 20, 2012. (12 Characters Max; No Dashes)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-01 on 07/20/12 = 1, if sampled again on 07/20/12 = 2, etc.)
4.) Matrix Codes: **GS** = Soil Gas, **WG** = Ground Water , **WS** = Surface Water **SO** = Soil, **SE** = Sediment, **SL** = Sludge, **SS**= Suface Soil Samples, **WQ** = Aqueous Blank Samples (trip, equipment, ambient, etc.), **SQ**= Soil Blanks
5.) Sample Method Codes: **CS** = Compsite Sample, **E2** = Elec. Submersible Pump (1982 +), **G** = Grab, **H** = Hollow Stem Auger, **PP** = Peristaltic Pump, **W** = Swab or Wipe. (See handout for more methods)
6.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

NOTES: Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-e. ERPIMS LOCID for TB, EB and AB are designated as FIELDQC samples.

8053-1076-7449
3.2 E 24

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Project Number: A012-108

Chain of Custody Number (1): 14043001

Project Name / Site Name: Melrose 2014 Annual

Facility: Melrose Air Force Range

Client Name: USACE ABQ

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart (251)709-6509

Turn Around Time

24 Hour	☐
7 Day	☐
Standard	X
Other	☐

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	Sample Code (2)	Sample Number (3)	Sample Matrix (4)	Sample Method (5)	Number of Containers	Total and Dissolved Metals 6020A	Cyanide 9012A	Nitrate, Nitrite 300.0	Chloride, Sulfate 300.0	Perchlorate 6860	Alkalinity 2320B	TDS 2540C	Thallium Total and Dissolved 6020A	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID (Alphabetical Notation)	
MWQ-22		30 04 2014	0841		N	1	WG		5	X	X	X	X	X	X	X	X				A	4
MWQ-22-a		30 04 2014	0841		FD	1	WG		5	X	X	X	X	X	X	X	X				A	5
MWQ-2		30 04 2014	1046		N	1	WG		5	X	X	X	X	X	X	X	X				B	6
MWQ-2-ms		30 04 2014	1046		MS	1	WG		5	X	X	X	X	X	X	X	X				B	7
MWQ-2-sd		30 04 2014	1046		SD	1	WG		5	X	X	X	X	X	X	X	X				B	8
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		
				-																		

Dissolved metals were field filtered.

Quality Assurance Samples (7)

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (Signed)	Date	Time
1.	5/1/14	1400	1. FedEx	4/30/14	1400
2. FedEx 1000	5/1/14		2. RBuow	5/1/14	1000
3.			3.		

Delivered Directly to Lab:	No	Shipped: No.:	2
Method of Shipment:	Fedex	Airbill Number:	
Analytical Lab:	GCAL	Delivery Location:	Baton Rouge, LA
Lab Recipient:		Delivery Date/Time:	

1.) Chain of Custody Number = site name (e.g., SS-125) and then date (yymmdd) collected + custody number (e.g. **SS1251207201**)...July 20, 2012. (12 Characters Max; No Dashes)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-01 on 07/20/12 = 1, if sampled again on 07/20/12 = 2, etc.)

4.) Matrix Codes: **GS** = Soil Gas, **WG** = Ground Water , **WS** = Surface Water **SO** = Soil, **SE** = Sediment, **SL** = Sludge, **SS**= Suface Soil Samples, **WQ** = Aqueous Blank Samples (trip, equipment, ambient, etc.), **SQ**= Soil Blanks

5.) Sample Method Codes: **CS** = Compsite Sample, **E2** = Elec. Submersible Pump (1982 +), **G** = Grab, **H** = Hollow Stem Auger, **PP** = Peristaltic Pump, **W** = Swab or Wipe. (See handout for more methods)

6.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

NOTES: Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c. ERPIMS LOCID for TB, EB and AB are designated as FIELDQC samples.

3.4 E24 8053-8/1078-7059

TRINITY
ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Page 1 of 1

Project Number: A012-108

Chain of Custody Number (1): 14050103

Project Name / Site Name: Melrose 2014 Annual

Facility: Melrose Air Force Range

Client Name: USACE ABQ

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart (251)709-6509

Turn Around Time

24 Hour ☐

7 Day ☐

Standard X

Other ☐

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	Sample Code (2)	Sample Number (3)	Sample Matrix (4)	Sample Method (5)	Number of Containers	Total and Dissolved Metals 6020A	Cyanide 9012A	Nitrate, Nitrite 300.0	Chloride, Sulfate 300.0	Perchlorate 6860	Alkalinity 2320B	TDS 2540C	Thallium Total and Dissolved 6020A	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID (Alphabetical Notation)
MWQ-14		01 05 2014	0751		N	1	WG		5	X	X	X	X	X	X	X	X				C 9
MWQ-20		01 05 2014	1016		N	1	WG		5	X	X	X	X	X	X	X	X				C 10

Dissolved metals were field filtered. 2.6, 4.6 E22

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By: (Signed)	Date	Time	Received by (Signed)	Date	Time
1.		5/1/14	1400	1. FEDEX		
2.	FEDEX 5-2-14		10:00	2.		
3.				3.	5-2-14	10:00

Delivered Directly to Lab:	No	Shipped: No.:	1
Method of Shipment:	Fedex	Airbill Number:	8055 3204 0084
Analytical Lab:	QCAL	Delivery Location:	Baton Rouge, LA
Lab Recipient:		Delivery Date/Time:	

1.) Chain of Custody Number = site name (e.g., SS-125) and then date (yymmdd) collected + custody number (e.g. SS125120720l)....July 20, 2012. (12 Characters Max; No Dashes)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-01 on 07/20/12 = 1, if sampled again on 07/20/12 = 2, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Ground Water, WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS= Suface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ = Soil Blanks

5.) Sample Method Codes: CS = Composite Sample, E2 = Elec. Submersible Pump (1982 +), G = Grab, H = Hollow Stem Auger, PP = Peristaltic Pump, W = Swab or Wipe. (See handout for more methods)

6.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

NOTES: Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c. ERPIMS LOCID for TB, EB and AB are designated as FIELDQC samples.

Data Validation Report

Melrose AFR

Trinity Analysis & Development Corp

SDG: 214102402 Date: November 26, 2014

Environmental Data Professional, LLC
1432 Watkins Street • Lake Charles, LA 70601 • phone: 337-540-0036 • fax: 337-478-6061

Disclaimer:

The validation performed and reported herein is based on specifications and procedures presented to eDATApro with the associated data package. Any qualifications or review not specified with package requirements was based on USEPA National Functional Guidelines for Inorganic and Organic Data Review.

Information contained in this report is based solely on the hardcopy and/or electronic deliverables that were submitted to eDATApro. eDATApro reserves the rights to modify or change the validation report if new information is presented or if this report is determined to be inaccurate or incomplete.

Cover Letter

Validation Report Date: November 26, 2014

Sample Delivery Group: 214102402

Project Name: Melrose AFR

Data validation personnel: Dana Hebert and Mike Stewart

Data Deliverables Included:

Validation Report:

✓ Introduction

✓ Sample Identification Cross- Reference Table

✓ Data Validation Components

✓ Data Validation Findings Summary

✓ Table 1-1, Summary of Qualified Data

✓ Table 1-2, Data Qualifier Reference Table

✓ Appendix I, Form I Data (qualified)

✓ Appendix II, Chain of Custody

Approval Signature: _____ Date: November 26, 2014

INTRODUCTION:

SDG: 214102402
Project Name: Melrose AFR
Laboratory: Gulf Coast Analytical Laboratories
Matrix: Water

Environmental Data Professional, LLC (eDATApro) received one electronic data package containing the results for one field sample. Level III Data Validation was performed according to guidance from *USEPA National Functional Guidelines for Organic Data Review, USEPA National Functional Guidelines for Inorganic Data Review* and the project specific Quality Assurance Project Plan.

The following sample was reviewed:

Sample ID	Lab ID	Collection Date/Time	Analyses
IDW-01	21410240201	10/23/2014 12:35 PM	[1-3]

Analyses Performed Codes:

[1] Flash Point (EPA 1010A)
[2] pH (SM 4500-H+ B/EPA 9040C)
[3] TPH (TX 1005)

DATA VALIDATION COMPONENTS

The data presented in this validation report was reviewed using a systematic process for evaluating performance and compliance of a set of data when compared to a set of standards to ascertain its completeness, correctness, and consistency using the methods and/or project defined criteria. The following components, as applicable to each analytical method, were reviewed in conducting the data validation:

- Data Completeness and Deliverables
- Sample Receipt (Chain of Custody Record)
    - Sample ID
    - Collection Date/Time
    - Matrix
    - Analysis Requests
- Chemical/Temperature Preservation
- Holding Times
- Analytical/Method Performance
    - Instrument Performance Checks
    - Instrument Calibrations
        - § Stability of Analyte Response (Average Response Factor)
        - § Linearity of Analytical Response (Correlation Coefficient)
        - § Initial Calibration (multi-point)
        - § Calibration Verification
    - Method Quality Controls
        - § Instrument/Method Blank
        - § Laboratory Control Sample
        - § Laboratory Duplicate/Replicate
        - § Surrogates
        - § Internal Standards
        - § Interference Check Sample
        - § ICP Serial Dilution
    - Preparation Batch Quality Control
        - § Preparation Blank
        - § Laboratory Control Sample
        - § Matrix Spikes
- Field Quality Controls
    - Field Duplicate
    - Field/Equipment Rinsate/Trip Blanks

Unless specifically stated otherwise in the method summary sections of this report, all components evaluated and data presented by the laboratory met the applicable acceptance criteria and are considered fully usable.

DATA VALIDATION FINDINGS SUMMARY

I. General Package:

A laboratory data package compliant for Level III data validation was received on November 11, 2014.

II. Flash Point (EPA 1010A):

All quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria; therefore, no data qualifications were necessary.

III. pH (SM 4500-H+ B/EPA 9040C):

All quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria; therefore, no data qualifications were necessary.

IV. TPH (TX 1005):

Matrix spike (MS) data were not presented by the laboratory for this method; therefore, matrix specific precision and accuracy could not be reviewed. The laboratory provided a laboratory control sample (LCS) and LCS duplicate (LCSD) with acceptable recoveries indicating the method was in control.

All other quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria.

Table 1-1

SUMMARY OF QUALIFIED DATA

No qualifications were applied to this data package

Table 1-2

DATA QUALIFIER REFERENCE

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
J-	The result is an estimated quantity, but the result may be biased low.	The result is an estimated quantity, but the result may be biased low.
J+	The result is an estimated quantity, but the result may be biased high.	The result is an estimated quantity, but the result may be biased high.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limits of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a “tentative identification.”	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated numerical value represents its approximate concentration.	Not applicable.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet the quality control criteria. The presence or absence of the analyte cannot be verified.	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet the quality control criteria. The presence or absence of the analyte cannot be verified.

Appendix I
Form 1 Data (Qualified)

Form 1 Data Sheet - TPH

Melrose AFB

Melrose AFR / A003-006

SDG: 214102402

COC Sample ID: **IDW-01** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **21410240201** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: TX 1005									
>C12-C28	10/23/2014 12:35	10/29/2014 0:30	1	2310	121	U	121	U	ug/L
>C28-C35	10/23/2014 12:35	10/29/2014 0:30	1	2310	121	U	121	U	ug/L
C6-C12	10/23/2014 12:35	10/29/2014 0:30	1	1390	104	U	104	U	ug/L
Total TPH (C6-C35)	10/23/2014 12:35	10/29/2014 0:30	1	2310	104	U	104	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFR / A003-006

SDG: 214102402

COC Sample ID: **IDW-01** Sample Matrix : **W**

Location ID: **NA**

Lab Sample ID: **21410240201** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: EPA 1010A									
FlashPoint	10/23/2014 12:35	11/03/2014 15:15	1	50	>170		>170		Deg F
Method: SM 4500-H+ B/EPA 9040C									
pH	10/23/2014 12:35	10/24/2014 12:17	1	1	7.71		7.71		pH unit

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Appendix II
Chain of Custody

TRINITY ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Page 1 of 1

Project Number: A012-109

Chain of Custody Number (1): MAER20141023109

Quote Number:

Project Name / Site Name: Melrose AFR

Facility:

Client Name: Trinity (850) 613-6800

Project Manager: Jonathan Kramer

Collected by: Ben Stewart

Turn Around Time

- 24 Hour
- 5 Day
- Standard X
- Other

Sample Analysis Requested (5)

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (mm-dd-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	All Flashpoint TX-1005								Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
DW-01		10/23/2014	1235		N	1	WG	4	X	X									01	B
				-																
				-																
				-																
				-																
				-																
				-																
				-																
				-																
				-																
				-																
				-																
				-																
				-																

Client ID: 4747 - TRINITY Analysis & Development Corp.
SDG: 214102402
Due Date: 10/31/14

Comments

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1.		10-23-14	1630			
2.	FedEx	10/24/14	0935		10/24/14	0935
3.						

Sample Delivery Details / Laboratory Receipt 2.4E24

Delivered Directly to Lab: No
Method of Shipment: FedEx
Analytical Lab: GCAL
Lab Recipient:

Shipped: No.:
Airbill Number: 5980 7379 8969
Delivery Location: Baton Rouge, LA
Delivery Date/Time:

1.) Chain of Custody Number = site name (e.g., 125) and then date (yymmdd) collected + custody number (e.g. 125-140720-01)…July 20, 2014. (13 Characters Max)

2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-01 on 07/20/14 = 01, if sampled again on 07/20/14 = 02, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Ground Water , WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS= Suface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ= Soil Blanks

5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

6.) Quality assurance samples are assigned by date (ddmmyy) and the number of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or ambient blank collected on July 20, 2014 in association with samples on the COC will be designated 20071401 in the Blank Lot Control Number field).

7.) Trip Blanks shall correspond to the first well sampled with VOCs, for example: SS125-MW-03-c

Data Validation Report

Melrose AFR Semi-Annual

Trinity Analysis & Development Corp

SDG: 214102205 Date: December 18, 2014

Environmental Data Professional, LLC
1432 Watkins Street • Lake Charles, LA 70601 • phone: 337-540-0036 • fax: 337-478-6061

Disclaimer:

The validation performed and reported herein is based on specifications and procedures presented to eDATApro with the associated data package. Any qualifications or review not specified with package requirements was based on USEPA National Functional Guidelines for Inorganic and Organic Data Review.

Information contained in this report is based solely on the hardcopy and/or electronic deliverables that were submitted to eDATApro. eDATApro reserves the rights to modify or change the validation report if new information is presented or if this report is determined to be inaccurate or incomplete.

Cover Letter

Validation Report Date: December 18, 2014

Sample Delivery Group: 214102205

Project Name: Melrose AFR Semi-Annual

Data validation personnel: Dana Hebert and Tony Duhon

Validation Report:

__✓__ Introduction

__✓__ Sample Identification Cross- Reference Table

__✓__ Data Validation Components

__✓__ Data Validation Findings Summary

__✓__ Table 1-1, Summary of Qualified Data

__✓__ Table 1-2, Data Qualifier Reference Table

__✓__ Appendix I, Form I Data (qualified)

__✓__ Appendix II, Chain of Custody

Approval Signature: Anthony Duhon Date: December 18, 2014

INTRODUCTION:

SDG: 214102205
Project Name: Melrose AFR Semi-Annual
Laboratory: Gulf Coast Analytical Laboratories/DHL Analytical/ALS Environmental
Matrix: Water

Environmental Data Professional, LLC (eDATApro) received one electronic data package containing the results for ten field samples, one field duplicate, one matrix spike pair and seven trip blanks. Level III Data Validation was performed according to guidance from *USEPA National Functional Guidelines for Organic Data Review, USEPA National Functional Guidelines for Inorganic Data Review* and the project specific Quality Assurance Project Plan.

The following samples were reviewed:

Sample ID	Lab ID	Collection Date/Time	Analyses
MA01MW002	21410220501	10/21/2014 10:40 AM	[1-13]
MA01MW002-c	21410220502	10/21/2014 10:40 AM	[1]
MA01MW001	21410220503	10/21/2014 12:20 PM	[1-13]
MA01MW004	21410220504	10/21/2014 11:00 AM	[1-13]
MA01MW004-a	21410220505	10/21/2014 11:00 AM	[1-13]
MA01MW004-c	21410220506	10/21/2014 11:00 AM	[1]
MA01MW003	21410220507	10/21/2014 12:26 PM	[1-13]
MA01MW003-c	21410220508	10/21/2014 12:26 PM	[1]
M114MW002	21410220509	10/22/2014 09:35 AM	[1-13]
M114MW002-c	21410220510	10/22/2014 09:35 AM	[1]
M114MW003	21410220511	10/22/2014 11:10 AM	[1-13]
M114MW004	21410220512	10/22/2014 10:25 AM	[1-13]
M114MW004-c	21410220513	10/22/2014 10:25 AM	[1]
M114MW001	21410220514	10/22/2014 12:35 PM	[1-13]
MWQ-24	21410220515	10/23/2014 09:32 AM	[1-13]
MWQ-24-ms	21410220516	10/23/2014 09:32 AM	[1-9,12,13]
MWQ-24-sd	21410220517	10/23/2014 09:32 AM	[1-9,12,13]
MWQ-24-c	21410220519	10/23/2014 09:32 AM	[1]
MA02MW001D	21410220520	10/23/2014 11:43 AM	[1-13]
MA02MW001D-c	21410220521	10/23/2014 11:43 AM	[1]

Analyses Performed Codes:

[1] Volatile Organics – SW-846 8260B
[2] Explosives – SW-846 8330
[3] TAL Metals (total) – SW-846 6020A
[4] Mercury (total) – SW-846 7470A
[5] TAL Metals (Dissolved) – SW-846 6020A
[6] Mercury (Dissolved) – SW-846 7470A
[7] Sulfate and Chloride – EPA 300.0
[8] Nitrate and Nitrite – EPA 353.2

[9] Total Cyanide – SW-846 9012B
[10] Total Alkalinity – SM 2320B
[11] Total Dissolved Solids – SM 2540C
[12] Perchlorate – SW-846 6860 (DHL Analytical)
[13] Hexavalent Chromium, Dissolved – EPA 218.6 (ALS Environmental)

DATA VALIDATION COMPONENTS

The data presented in this validation report was reviewed using a systematic process for evaluating performance and compliance of a set of data when compared to a set of standards to ascertain its completeness, correctness, and consistency using the methods and/or project defined criteria. The following components, as applicable to each analytical method, were reviewed in conducting the data validation:

- Data Completeness and Deliverables
- Sample Receipt (Chain of Custody Record)
    - Sample ID
    - Collection Date/Time
    - Matrix
    - Analysis Requests
- Chemical/Temperature Preservation
- Holding Times
- Analytical/Method Performance
    - Instrument Performance Checks
    - Instrument Calibrations
        - § Stability of Analyte Response (Average Response Factor)
        - § Linearity of Analytical Response (Correlation Coefficient)
        - § Initial Calibration (multi-point)
        - § Calibration Verification
    - Method Quality Controls
        - § Instrument/Method Blank
        - § Laboratory Control Sample
        - § Laboratory Duplicate/Replicate
        - § Surrogates
        - § Internal Standards
        - § Interference Check Sample
        - § ICP Serial Dilution
    - Preparation Batch Quality Control
        - § Preparation Blank
        - § Laboratory Control Sample
        - § Matrix Spikes
- Field Quality Controls
    - Field Duplicate
    - Field/Equipment Rinsate/Trip Blanks

Unless specifically stated otherwise in the method summary sections of this report, all components evaluated and data presented by the laboratory met the applicable acceptance criteria and are considered fully usable.

DATA VALIDATION FINDINGS SUMMARY

I. General Package:

A laboratory data package compliant for Level III data validation was received on December 8, 2014. No resubmissions were necessary.

Comparisons between concentrations of target analytes in sample MA01MW004 and field duplicate MA01MW004-a were within field precision acceptance criteria unless noted otherwise.

II. Method SW-846 8260B - Volatile Organic Analyses:

Recovery of Dichlorodifluoromethane in the initial calibration verification (ICV) standard associated with sample MA02MW001D-c exceeded upper acceptance criteria. Recovery of Acetone in the laboratory control sample duplicate (LCSD) associated with sample MA02MW001D-c exceeded upper acceptance criteria, and comparison between measurements of this analyte in the laboratory control sample analyses (LCS/LCSD) exceeded precision acceptance criteria. This analyte was not detected in the associated sample. No data qualifications were necessary.

All other quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria.

III. Method SW-846 8330 - Explosives

Surrogate analyte 1,2-Dinitrobenzene was not recovered in sample M114MW003 and the dilution analysis of sample MWQ-24; however, the sample extracts were significantly diluted prior to analysis which altered the amount of surrogate in each. Evaluation of the surrogate recoveries did not apply to these samples, and no data qualifications were necessary.

Recoveries of 1,3,5-Trinitrobenzene in the LCS and LCSD samples from preparation batch 543548 exceeded lower acceptance criteria. The laboratory results for this analyte in samples MA01MW002, MA01MW001, MA01MW004, MA01MW004-a and MA01MW003 were modified to non-detect estimate (UJ).

Recovery of 1,3,5-Trinitrobenzene in the LCSD and MSD of sample MWQ-24 from preparation batch 543732 exceeded lower acceptance criteria, and comparisons between measurements of this analyte in the LCS and LCSD and MS and MSD exceeded precision acceptance criteria. Acceptable recoveries were achieved in the LCS and MS analyses. Field sample results for this analyte were modified to non-detect estimate (UJ).

Recoveries of Nitrobenzene in the MS and MSD analyses of sample MWQ-24 exceeded acceptance criteria, and comparison between measurements of this analyte in the MS and MSD exceeded precision acceptance criteria; however, the concentration of this analyte in the parent sample was significantly greater than the amount of spike added. No data qualifications were necessary.

Recovery of Tetryl in the MS and MSD analyses of sample MWQ-24 exceeded lower acceptance criteria at less than ten percent (<10%). Results for this analyte in field samples were modified to non-detect estimate (UJ).

Recoveries of HMX and RDX in the MS and/or MSD analyses of sample MWQ-24 exceeded upper acceptance criteria, and comparisons between measurements of these analytes in the MS and MSD exceeded precision acceptance criteria. These analytes were not detected in the field samples. No data qualifications were necessary.

All other quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria.

IV. Method SW-846 6020A – TAL metals (total)

Several analyte concentrations of total metals were less than the concentration of the corresponding dissolved analyte concentration. The laboratory attributed this anomaly to lack of homogeneity between field sample aliquots. No gross differences were observed.

Recoveries of Sodium in low-level calibration verification standards exceeded upper acceptance criteria. None of the reported Sodium concentrations were near the lower level of calibration. No data qualifications were necessary.

Recoveries of Calcium, Magnesium and/or Sodium in the matrix spike analyses exceeded acceptance criteria; however, the un-spiked sample concentrations of these analytes were greater than four times (4x) the concentration of the analyte fortification. No result qualifications were applied based upon these recoveries.

All other quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria.

V. Method SW-846 6020A – TAL metals (dissolved)

Recoveries of Sodium in low-level calibration verification standards exceeded upper acceptance criteria. None of the reported Sodium concentrations were near the lower level of calibration. No data qualifications were necessary.

Recoveries of dissolved Calcium, dissolved Magnesium and/or dissolved Sodium in the matrix spike analyses exceeded acceptance criteria; however, the un-spiked sample concentrations of these analytes were greater than four times (4x) the concentration of the analyte fortification. No result qualifications were applied based upon these recoveries.

Recoveries of dissolved Thallium in the MS and MSD analyses of sample MA01MW002 exceeded lower acceptance criteria. Recovery of Selenium in the MS exceeded lower acceptance criteria; however, acceptable recoveries of this analyte were achieved in the MSD and LCS analyses. Thallium results for field samples were modified to non-detect estimate (UJ).

Dissolved Lead was present in the method blank from preparation batch 543538. This analyte was not detected in any of the associated field samples. No data qualifications were necessary.

All other quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria.

VI. Method SW-846 7470A – Mercury (total)

All quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria; therefore, no data qualifications were necessary.

VII. Method SW-846 7470A – Mercury (dissolved)

Recoveries of dissolved Mercury in the MS and MSD analyses of field duplicate sample MA01 MW004-a exceeded lower acceptance criteria. The results for this analyte in field samples were modified to non-detect estimate (UJ).

All other quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria.

VIII. Method EPA 300.0 – Sulfate and Chloride

All quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria; therefore, no data qualifications were necessary.

IX. Method EPA 353.2 – Nitrate and Nitrite

All quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria; therefore, no data qualifications were necessary.

X. Method SW-846 9012B – Total Cyanide

Recovery of Cyanide in the MS analysis of sample M114MW002 exceeded lower acceptance criteria, and comparison between measurements of this analyte in this sample and a laboratory duplicate exceeded precision acceptance criteria. The concentrations of Cyanide in field samples associated with these QC analyses were reported as estimate. No further qualifications were necessary.

Comparison between measurements of Cyanide in sample MA01MW004 and field duplicate MA01MW004-a exceeded precision acceptance criteria. Field precision is used to demonstrate consistency in sample collection and homogeneity in sample matrix. Laboratory results were not qualified based upon field precision.

Cyanide was present at estimate concentrations in the method blanks for preparation batches 543680 and 544446. Results for associated samples M114MW002, M114MW003. M114MW004, M114MW001 and MWQ-24 were modified to non-detect (U) at the reporting limit.

All other quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria.

XI. Method SM 2320B – Total Alkalinity

All quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria; therefore, no data qualifications were necessary.

XII. Method SM 2540C - Total Dissolved Solids

Comparison between measurements of Total Dissolved Solids (TDS) in sample MWQ-24 and a laboratory duplicate exceeded precision acceptance criteria. TDS results for associated samples M114MW003, M114MW001, MWQ-24 and MA02MW001D were modified to estimate (J).

All other quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria.

XIII. Method SW-846 6860 – Perchlorate

The Perchlorate analyses were performed by DHL Analytical in Round Rock, Texas.

The laboratory applied a qualifier of “N” to the results to indicate that the laboratory was not NELAC certified for this analyte at the time of analysis. This qualifier was removed.

All quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria; therefore, no data qualifications were necessary.

XIV. Method EPA 218.6 – Hexavalent Chromium, Dissolved

The Dissolved Hexavalent Chromium analyses were performed by ALS Environmental in Rochester, New York.

All quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria; therefore, no data qualifications were necessary.

eDATApro

Table 1-1

SUMMARY OF QUALIFIED DATA

Target Compound	Sample(s) Affected	Lab Result	Lab Qual	Val Result	Val Qual	Reason for Qualification
1,3,5-Trinitrobenzene	M114MW001	0.15	UQ	0.15	UJ	Low recoveries in LCS and MS samples.
	M114MW002	0.15	UQ	0.15	UJ	
	M114MW003	3	UQ	3	UJ	
	M114MW004	0.15	UQ	0.15	UJ	
	MA01MW001	0.15	UQ	0.15	UJ	
	MA01MW002	0.15	UQ	0.15	UJ	
	MA01MW003	0.15	UQ	0.15	UJ	
	MA01MW004	0.15	UQ	0.15	UJ	
	MA01MW004-a	0.15	UQ	0.15	UJ	
	MA02MW001D	0.15	UQ	0.15	UJ	
	MWQ-24	0.15	UQ	0.15	UJ	
Tetryl	M114MW001	0.24	U	0.24	UJ	Low recovery in MS & MSD.
	M114MW002	0.24	U	0.24	UJ	
	M114MW003	4.8	U	4.8	UJ	
	M114MW004	0.24	U	0.24	UJ	
	MA01MW001	0.24	U	0.24	UJ	
	MA01MW002	0.24	U	0.24	UJ	
	MA01MW003	0.24	U	0.24	UJ	
	MA01MW004	0.24	U	0.24	UJ	
	MA01MW004-a	0.24	U	0.24	UJ	
	MA02MW001D	0.24	U	0.24	UJ	
	MWQ-24	0.24	U	0.24	UJ	
Mercury, Dissolved	M114MW001	0.07	U	0.07	UJ	Low recovery in MS & MSD.
	M114MW002	0.07	U	0.07	UJ	
	M114MW003	0.07	U	0.07	UJ	
	M114MW004	0.07	U	0.07	UJ	
	MA01MW001	0.07	U	0.07	UJ	
	MA01MW002	0.07	U	0.07	UJ	
	MA01MW003	0.07	U	0.07	UJ	
	MA01MW004	0.07	U	0.07	UJ	
	MA01MW004-a	0.07	U	0.07	UJ	
	MA02MW001D	0.07	U	0.07	UJ	
	MWQ-24	0.07	U	0.07	UJ	
Thallium, Dissolved	M114MW001	2.5	U	2.5	UJ	Low recovery in MS & MSD.
	M114MW002	5	U	5	UJ	
	M114MW003	5	U	5	UJ	
	M114MW004	5	U	5	UJ	
	MA01MW001	1.25	U	1.25	UJ	
	MA01MW002	1.25	U	1.25	UJ	
	MA01MW003	1.25	U	1.25	UJ	
	MA01MW004	0.5	U	0.5	UJ	
	MA01MW004-a	0.5	U	0.5	UJ	
	MA02MW001D	5	U	5	UJ	
Cyanide	M114MW001	0.0023	J	0.005	U	Analyte present in method blank.
	M114MW002	0.0013	J	0.005	U	
	M114MW003	0.0005	J	0.005	U	
	M114MW004	0.0007	J	0.005	U	
	MWQ-24	0.0014	J	0.005	U	
Perchlorate	M114MW001	0.00301	N	0.00301		Removal of lab qualifier.
	M114MW002	0.00229	N	0.00229		
	M114MW003	0.00338	N	0.00338		
	M114MW004	0.00233	N	0.00233		

Perchlorate	MA01MW001	0.000308	N	0.000308		Removal of lab qualifier.
	MA01MW002	0.00151	N	0.00151		
	MA01MW003	0.000335	N	0.000335		
	MA01MW004	0.00381	N	0.00381		
	MA01MW004-a	0.00377	N	0.00377		
	MA02MW001D	0.0149	N	0.0149		
	MWQ-24	0.000135	JN	0.000135	J	
Total Dissolved Solids(TDS)	M114MW001	8190		8190	J	High laboratory duplicate RPD.
	M114MW003	9390		9390	J	
	MA02MW001D	7040		7040	J	
	MWQ-24	344		344	J	

Table 1-2

DATA QUALIFIER REFERENCE

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limits of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a “tentative identification.”	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated numerical value represents its approximate concentration.	Not applicable.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet the quality control criteria. The presence or absence of the analyte cannot be verified.	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet the quality control criteria. The presence or absence of the analyte cannot be verified.

LABORATORY QUALIFIER

Qualifier	Organics	Inorganics
Q	LCS/LCSD recovery and/or RPD was outside control limits/CCV did not meet acceptance criteria	LCS/LCSD recovery and/or RPD was outside control limits/CCV did not meet acceptance criteria

Appendix I
Form 1 Data (Qualified)

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MA01MW002**
Location ID: **NA**
Lab Sample ID: **21410220501**
Sample Type: **Site Sample**
Method: **EPA 8260B**

Sample Matrix : **Water**
Sample Date: **10/21/2014 10:40**
Analysis Date: **10/24/2014 18:00**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	1	0.12	U	0.12	U	ug/L
71-55-6	1,1,1-Trichloroethane	1	1	0.123	U	0.123	U	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	1	0.109	U	0.109	U	ug/L
79-00-5	1,1,2-Trichloroethane	1	1	0.159	U	0.159	U	ug/L
75-34-3	1,1-Dichloroethane	1	1	0.171	U	0.171	U	ug/L
75-35-4	1,1-Dichloroethene	1	1	0.2	U	0.2	U	ug/L
563-58-6	1,1-Dichloropropene	1	1	0.052	U	0.052	U	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	1	0.079	U	0.079	U	ug/L
96-18-4	1,2,3-Trichloropropane	1	1	0.065	U	0.065	U	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	1	0.105	U	0.105	U	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	1	0.084	U	0.084	U	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	1	1	0.194	U	0.194	U	ug/L
106-93-4	1,2-Dibromoethane	1	1	0.102	U	0.102	U	ug/L
95-50-1	1,2-Dichlorobenzene	1	1	0.135	U	0.135	U	ug/L
107-06-2	1,2-Dichloroethane	1	1	0.116	U	0.116	U	ug/L
78-87-5	1,2-Dichloropropane	1	1	0.15	U	0.15	U	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	1	0.066	U	0.066	U	ug/L
541-73-1	1,3-Dichlorobenzene	1	1	0.138	U	0.138	U	ug/L
142-28-9	1,3-Dichloropropane	1	1	0.059	U	0.059	U	ug/L
106-46-7	1,4-Dichlorobenzene	1	1	0.083	U	0.083	U	ug/L
594-20-7	2,2-Dichloropropane	1	1	0.17	U	0.17	U	ug/L
78-93-3	2-Butanone	1	5	0.142	U	0.142	U	ug/L
95-49-8	2-Chlorotoluene	1	1	0.08	U	0.08	U	ug/L
591-78-6	2-Hexanone	1	5	0.122	U	0.122	U	ug/L
106-43-4	4-Chlorotoluene	1	1	0.124	U	0.124	U	ug/L
99-87-6	4-Isopropyltoluene	1	1	0.07	U	0.07	U	ug/L
108-10-1	4-Methyl-2-pentanone	1	5	0.12	U	0.12	U	ug/L
67-64-1	Acetone	1	5	0.193	U	0.193	U	ug/L
71-43-2	Benzene	1	1	0.111	U	0.111	U	ug/L
108-86-1	Bromobenzene	1	1	0.145	U	0.145	U	ug/L
74-97-5	Bromochloromethane	1	1	0.127	U	0.127	U	ug/L
75-27-4	Bromodichloromethane	1	1	0.083	U	0.083	U	ug/L
75-25-2	Bromoform	1	1	0.215	U	0.215	U	ug/L
74-83-9	Bromomethane	1	1	0.427	U	0.427	U	ug/L
75-15-0	Carbon disulfide	1	1	0.19	U	0.19	U	ug/L
56-23-5	Carbon tetrachloride	1	1	0.248	U	0.248	U	ug/L
108-90-7	Chlorobenzene	1	1	0.083	U	0.083	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MA01MW002**
Location ID: **NA**
Lab Sample ID: **21410220501**
Sample Type: **Site Sample**
Method: **EPA 8260B**

Sample Matrix : **Water**
Sample Date: **10/21/2014 10:40**
Analysis Date: **10/24/2014 18:00**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
75-00-3	Chloroethane	1	1	0.235	U	0.235	U	ug/L
67-66-3	Chloroform	1	1	0.155	U	0.155	U	ug/L
74-87-3	Chloromethane	1	1	0.144	U	0.144	U	ug/L
156-59-2	cis-1,2-Dichloroethene	1	1	0.103	U	0.103	U	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	1	0.124	U	0.124	U	ug/L
74-95-3	Dibromomethane	1	1	0.211	U	0.211	U	ug/L
75-71-8	Dichlorodifluoromethane	1	1	0.145	U	0.145	U	ug/L
100-41-4	Ethylbenzene	1	1	0.109	U	0.109	U	ug/L
87-68-3	Hexachlorobutadiene	1	1	0.265	U	0.265	U	ug/L
98-82-8	Isopropylbenzene (Cumene)	1	1	0.13	U	0.13	U	ug/L
136777-61-2	m,p-Xylene	1	2	0.123	U	0.123	U	ug/L
75-09-2	Methylene chloride	1	5	0.149	U	0.149	U	ug/L
91-20-3	Naphthalene	1	1	0.176	U	0.176	U	ug/L
104-51-8	n-Butylbenzene	1	1	0.123	U	0.123	U	ug/L
103-65-1	n-Propylbenzene	1	1	0.727	U	0.727	U	ug/L
95-47-6	o-Xylene	1	1	0.055	U	0.055	U	ug/L
135-98-8	sec-Butylbenzene	1	1	0.107	U	0.107	U	ug/L
100-42-5	Styrene	1	1	0.089	U	0.089	U	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	1	5	0.078	U	0.078	U	ug/L
98-06-6	tert-Butylbenzene	1	1	0.087	U	0.087	U	ug/L
127-18-4	Tetrachloroethene	1	1	0.193	U	0.193	U	ug/L
108-88-3	Toluene	1	1	0.122	U	0.122	U	ug/L
156-60-5	trans-1,2-Dichloroethene	1	1	0.077	U	0.077	U	ug/L
10061-02-6	trans-1,3-Dichloropropene	1	1	0.128	U	0.128	U	ug/L
79-01-6	Trichloroethene	1	1	0.161	U	0.161	U	ug/L
75-69-4	Trichlorofluoromethane	1	1	0.157	U	0.157	U	ug/L
75-01-4	Vinyl chloride	1	1	0.127	U	0.127	U	ug/L

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MA01MW002-c**
Location ID: **NA**
Lab Sample ID: **21410220502**
Sample Type: **Trip Blank**
Method: **EPA 8260B**

Sample Matrix : **Water**
Sample Date: **10/21/2014 10:40**
Analysis Date: **10/24/2014 18:23**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	1	0.12	U	0.12	U	ug/L
71-55-6	1,1,1-Trichloroethane	1	1	0.123	U	0.123	U	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	1	0.109	U	0.109	U	ug/L
79-00-5	1,1,2-Trichloroethane	1	1	0.159	U	0.159	U	ug/L
75-34-3	1,1-Dichloroethane	1	1	0.171	U	0.171	U	ug/L
75-35-4	1,1-Dichloroethene	1	1	0.2	U	0.2	U	ug/L
563-58-6	1,1-Dichloropropene	1	1	0.052	U	0.052	U	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	1	0.079	U	0.079	U	ug/L
96-18-4	1,2,3-Trichloropropane	1	1	0.065	U	0.065	U	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	1	0.105	U	0.105	U	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	1	0.084	U	0.084	U	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	1	1	0.194	U	0.194	U	ug/L
106-93-4	1,2-Dibromoethane	1	1	0.102	U	0.102	U	ug/L
95-50-1	1,2-Dichlorobenzene	1	1	0.135	U	0.135	U	ug/L
107-06-2	1,2-Dichloroethane	1	1	0.116	U	0.116	U	ug/L
78-87-5	1,2-Dichloropropane	1	1	0.15	U	0.15	U	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	1	0.066	U	0.066	U	ug/L
541-73-1	1,3-Dichlorobenzene	1	1	0.138	U	0.138	U	ug/L
142-28-9	1,3-Dichloropropane	1	1	0.059	U	0.059	U	ug/L
106-46-7	1,4-Dichlorobenzene	1	1	0.083	U	0.083	U	ug/L
594-20-7	2,2-Dichloropropane	1	1	0.17	U	0.17	U	ug/L
78-93-3	2-Butanone	1	5	0.142	U	0.142	U	ug/L
95-49-8	2-Chlorotoluene	1	1	0.08	U	0.08	U	ug/L
591-78-6	2-Hexanone	1	5	0.122	U	0.122	U	ug/L
106-43-4	4-Chlorotoluene	1	1	0.124	U	0.124	U	ug/L
99-87-6	4-Isopropyltoluene	1	1	0.07	U	0.07	U	ug/L
108-10-1	4-Methyl-2-pentanone	1	5	0.12	U	0.12	U	ug/L
67-64-1	Acetone	1	5	0.193	U	0.193	U	ug/L
71-43-2	Benzene	1	1	0.111	U	0.111	U	ug/L
108-86-1	Bromobenzene	1	1	0.145	U	0.145	U	ug/L
74-97-5	Bromochloromethane	1	1	0.127	U	0.127	U	ug/L
75-27-4	Bromodichloromethane	1	1	0.083	U	0.083	U	ug/L
75-25-2	Bromoform	1	1	0.215	U	0.215	U	ug/L
74-83-9	Bromomethane	1	1	0.427	U	0.427	U	ug/L
75-15-0	Carbon disulfide	1	1	0.19	U	0.19	U	ug/L
56-23-5	Carbon tetrachloride	1	1	0.248	U	0.248	U	ug/L
108-90-7	Chlorobenzene	1	1	0.083	U	0.083	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MA01MW002-c**
Location ID: **NA**
Lab Sample ID: **21410220502**
Sample Type: **Trip Blank**
Method: **EPA 8260B**

Sample Matrix : **Water**
Sample Date: **10/21/2014 10:40**
Analysis Date: **10/24/2014 18:23**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
75-00-3	Chloroethane	1	1	0.235	U	0.235	U	ug/L
67-66-3	Chloroform	1	1	0.155	U	0.155	U	ug/L
74-87-3	Chloromethane	1	1	0.144	U	0.144	U	ug/L
156-59-2	cis-1,2-Dichloroethene	1	1	0.103	U	0.103	U	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	1	0.124	U	0.124	U	ug/L
74-95-3	Dibromomethane	1	1	0.211	U	0.211	U	ug/L
75-71-8	Dichlorodifluoromethane	1	1	0.145	U	0.145	U	ug/L
100-41-4	Ethylbenzene	1	1	0.109	U	0.109	U	ug/L
87-68-3	Hexachlorobutadiene	1	1	0.265	U	0.265	U	ug/L
98-82-8	Isopropylbenzene (Cumene)	1	1	0.13	U	0.13	U	ug/L
136777-61-2	m,p-Xylene	1	2	0.123	U	0.123	U	ug/L
75-09-2	Methylene chloride	1	5	0.149	U	0.149	U	ug/L
91-20-3	Naphthalene	1	1	0.176	U	0.176	U	ug/L
104-51-8	n-Butylbenzene	1	1	0.123	U	0.123	U	ug/L
103-65-1	n-Propylbenzene	1	1	0.727	U	0.727	U	ug/L
95-47-6	o-Xylene	1	1	0.055	U	0.055	U	ug/L
135-98-8	sec-Butylbenzene	1	1	0.107	U	0.107	U	ug/L
100-42-5	Styrene	1	1	0.089	U	0.089	U	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	1	5	0.078	U	0.078	U	ug/L
98-06-6	tert-Butylbenzene	1	1	0.087	U	0.087	U	ug/L
127-18-4	Tetrachloroethene	1	1	0.193	U	0.193	U	ug/L
108-88-3	Toluene	1	1	0.122	U	0.122	U	ug/L
156-60-5	trans-1,2-Dichloroethene	1	1	0.077	U	0.077	U	ug/L
10061-02-6	trans-1,3-Dichloropropene	1	1	0.128	U	0.128	U	ug/L
79-01-6	Trichloroethene	1	1	0.161	U	0.161	U	ug/L
75-69-4	Trichlorofluoromethane	1	1	0.157	U	0.157	U	ug/L
75-01-4	Vinyl chloride	1	1	0.127	U	0.127	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MA01MW001**
Location ID: **NA**
Lab Sample ID: **21410220503**
Sample Type: **Site Sample**
Method: **EPA 8260B**

Sample Matrix : **Water**
Sample Date: **10/21/2014 12:20**
Analysis Date: **10/24/2014 18:46**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	1	0.12	U	0.12	U	ug/L
71-55-6	1,1,1-Trichloroethane	1	1	0.123	U	0.123	U	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	1	0.109	U	0.109	U	ug/L
79-00-5	1,1,2-Trichloroethane	1	1	0.159	U	0.159	U	ug/L
75-34-3	1,1-Dichloroethane	1	1	0.171	U	0.171	U	ug/L
75-35-4	1,1-Dichloroethene	1	1	0.2	U	0.2	U	ug/L
563-58-6	1,1-Dichloropropene	1	1	0.052	U	0.052	U	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	1	0.079	U	0.079	U	ug/L
96-18-4	1,2,3-Trichloropropane	1	1	0.065	U	0.065	U	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	1	0.105	U	0.105	U	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	1	0.084	U	0.084	U	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	1	1	0.194	U	0.194	U	ug/L
106-93-4	1,2-Dibromoethane	1	1	0.102	U	0.102	U	ug/L
95-50-1	1,2-Dichlorobenzene	1	1	0.135	U	0.135	U	ug/L
107-06-2	1,2-Dichloroethane	1	1	0.116	U	0.116	U	ug/L
78-87-5	1,2-Dichloropropane	1	1	0.15	U	0.15	U	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	1	0.066	U	0.066	U	ug/L
541-73-1	1,3-Dichlorobenzene	1	1	0.138	U	0.138	U	ug/L
142-28-9	1,3-Dichloropropane	1	1	0.059	U	0.059	U	ug/L
106-46-7	1,4-Dichlorobenzene	1	1	0.083	U	0.083	U	ug/L
594-20-7	2,2-Dichloropropane	1	1	0.17	U	0.17	U	ug/L
78-93-3	2-Butanone	1	5	0.142	U	0.142	U	ug/L
95-49-8	2-Chlorotoluene	1	1	0.08	U	0.08	U	ug/L
591-78-6	2-Hexanone	1	5	0.122	U	0.122	U	ug/L
106-43-4	4-Chlorotoluene	1	1	0.124	U	0.124	U	ug/L
99-87-6	4-Isopropyltoluene	1	1	0.07	U	0.07	U	ug/L
108-10-1	4-Methyl-2-pentanone	1	5	0.12	U	0.12	U	ug/L
67-64-1	Acetone	1	5	0.193	U	0.193	U	ug/L
71-43-2	Benzene	1	1	0.111	U	0.111	U	ug/L
108-86-1	Bromobenzene	1	1	0.145	U	0.145	U	ug/L
74-97-5	Bromochloromethane	1	1	0.127	U	0.127	U	ug/L
75-27-4	Bromodichloromethane	1	1	0.083	U	0.083	U	ug/L
75-25-2	Bromoform	1	1	0.215	U	0.215	U	ug/L
74-83-9	Bromomethane	1	1	0.427	U	0.427	U	ug/L
75-15-0	Carbon disulfide	1	1	0.19	U	0.19	U	ug/L
56-23-5	Carbon tetrachloride	1	1	0.248	U	0.248	U	ug/L
108-90-7	Chlorobenzene	1	1	0.083	U	0.083	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MA01MW001**
Location ID: **NA**
Lab Sample ID: **21410220503**
Sample Type: **Site Sample**
Method: **EPA 8260B**

Sample Matrix : **Water**
Sample Date: **10/21/2014 12:20**
Analysis Date: **10/24/2014 18:46**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
75-00-3	Chloroethane	1	1	0.235	U	0.235	U	ug/L
67-66-3	Chloroform	1	1	0.155	U	0.155	U	ug/L
74-87-3	Chloromethane	1	1	0.144	U	0.144	U	ug/L
156-59-2	cis-1,2-Dichloroethene	1	1	0.103	U	0.103	U	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	1	0.124	U	0.124	U	ug/L
74-95-3	Dibromomethane	1	1	0.211	U	0.211	U	ug/L
75-71-8	Dichlorodifluoromethane	1	1	0.145	U	0.145	U	ug/L
100-41-4	Ethylbenzene	1	1	0.109	U	0.109	U	ug/L
87-68-3	Hexachlorobutadiene	1	1	0.265	U	0.265	U	ug/L
98-82-8	Isopropylbenzene (Cumene)	1	1	0.13	U	0.13	U	ug/L
136777-61-2	m,p-Xylene	1	2	0.123	U	0.123	U	ug/L
75-09-2	Methylene chloride	1	5	0.149	U	0.149	U	ug/L
91-20-3	Naphthalene	1	1	0.176	U	0.176	U	ug/L
104-51-8	n-Butylbenzene	1	1	0.123	U	0.123	U	ug/L
103-65-1	n-Propylbenzene	1	1	0.727	U	0.727	U	ug/L
95-47-6	o-Xylene	1	1	0.055	U	0.055	U	ug/L
135-98-8	sec-Butylbenzene	1	1	0.107	U	0.107	U	ug/L
100-42-5	Styrene	1	1	0.089	U	0.089	U	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	1	5	0.078	U	0.078	U	ug/L
98-06-6	tert-Butylbenzene	1	1	0.087	U	0.087	U	ug/L
127-18-4	Tetrachloroethene	1	1	0.193	U	0.193	U	ug/L
108-88-3	Toluene	1	1	0.122	U	0.122	U	ug/L
156-60-5	trans-1,2-Dichloroethene	1	1	0.077	U	0.077	U	ug/L
10061-02-6	trans-1,3-Dichloropropene	1	1	0.128	U	0.128	U	ug/L
79-01-6	Trichloroethene	1	1	0.161	U	0.161	U	ug/L
75-69-4	Trichlorofluoromethane	1	1	0.157	U	0.157	U	ug/L
75-01-4	Vinyl chloride	1	1	0.127	U	0.127	U	ug/L

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MA01MW004**
Location ID: **NA**
Lab Sample ID: **21410220504**
Sample Type: **Site Sample**
Method: **EPA 8260B**

Sample Matrix : **Water**
Sample Date: **10/21/2014 11:00**
Analysis Date: **10/24/2014 19:09**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	1	0.12	U	0.12	U	ug/L
71-55-6	1,1,1-Trichloroethane	1	1	0.123	U	0.123	U	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	1	0.109	U	0.109	U	ug/L
79-00-5	1,1,2-Trichloroethane	1	1	0.159	U	0.159	U	ug/L
75-34-3	1,1-Dichloroethane	1	1	0.171	U	0.171	U	ug/L
75-35-4	1,1-Dichloroethene	1	1	0.2	U	0.2	U	ug/L
563-58-6	1,1-Dichloropropene	1	1	0.052	U	0.052	U	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	1	0.079	U	0.079	U	ug/L
96-18-4	1,2,3-Trichloropropane	1	1	0.065	U	0.065	U	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	1	0.105	U	0.105	U	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	1	0.084	U	0.084	U	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	1	1	0.194	U	0.194	U	ug/L
106-93-4	1,2-Dibromoethane	1	1	0.102	U	0.102	U	ug/L
95-50-1	1,2-Dichlorobenzene	1	1	0.135	U	0.135	U	ug/L
107-06-2	1,2-Dichloroethane	1	1	0.116	U	0.116	U	ug/L
78-87-5	1,2-Dichloropropane	1	1	0.15	U	0.15	U	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	1	0.066	U	0.066	U	ug/L
541-73-1	1,3-Dichlorobenzene	1	1	0.138	U	0.138	U	ug/L
142-28-9	1,3-Dichloropropane	1	1	0.059	U	0.059	U	ug/L
106-46-7	1,4-Dichlorobenzene	1	1	0.083	U	0.083	U	ug/L
594-20-7	2,2-Dichloropropane	1	1	0.17	U	0.17	U	ug/L
78-93-3	2-Butanone	1	5	0.142	U	0.142	U	ug/L
95-49-8	2-Chlorotoluene	1	1	0.08	U	0.08	U	ug/L
591-78-6	2-Hexanone	1	5	0.122	U	0.122	U	ug/L
106-43-4	4-Chlorotoluene	1	1	0.124	U	0.124	U	ug/L
99-87-6	4-Isopropyltoluene	1	1	0.07	U	0.07	U	ug/L
108-10-1	4-Methyl-2-pentanone	1	5	0.12	U	0.12	U	ug/L
67-64-1	Acetone	1	5	0.193	U	0.193	U	ug/L
71-43-2	Benzene	1	1	0.111	U	0.111	U	ug/L
108-86-1	Bromobenzene	1	1	0.145	U	0.145	U	ug/L
74-97-5	Bromochloromethane	1	1	0.127	U	0.127	U	ug/L
75-27-4	Bromodichloromethane	1	1	0.083	U	0.083	U	ug/L
75-25-2	Bromoform	1	1	0.215	U	0.215	U	ug/L
74-83-9	Bromomethane	1	1	0.427	U	0.427	U	ug/L
75-15-0	Carbon disulfide	1	1	0.19	U	0.19	U	ug/L
56-23-5	Carbon tetrachloride	1	1	0.248	U	0.248	U	ug/L
108-90-7	Chlorobenzene	1	1	0.083	U	0.083	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MA01MW004**
Location ID: **NA**
Lab Sample ID: **21410220504**
Sample Type: **Site Sample**
Method: **EPA 8260B**

Sample Matrix : **Water**
Sample Date: **10/21/2014 11:00**
Analysis Date: **10/24/2014 19:09**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
75-00-3	Chloroethane	1	1	0.235	U	0.235	U	ug/L
67-66-3	Chloroform	1	1	0.155	U	0.155	U	ug/L
74-87-3	Chloromethane	1	1	0.144	U	0.144	U	ug/L
156-59-2	cis-1,2-Dichloroethene	1	1	0.103	U	0.103	U	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	1	0.124	U	0.124	U	ug/L
74-95-3	Dibromomethane	1	1	0.211	U	0.211	U	ug/L
75-71-8	Dichlorodifluoromethane	1	1	0.145	U	0.145	U	ug/L
100-41-4	Ethylbenzene	1	1	0.109	U	0.109	U	ug/L
87-68-3	Hexachlorobutadiene	1	1	0.265	U	0.265	U	ug/L
98-82-8	Isopropylbenzene (Cumene)	1	1	0.13	U	0.13	U	ug/L
136777-61-2	m,p-Xylene	1	2	0.123	U	0.123	U	ug/L
75-09-2	Methylene chloride	1	5	0.149	U	0.149	U	ug/L
91-20-3	Naphthalene	1	1	0.176	U	0.176	U	ug/L
104-51-8	n-Butylbenzene	1	1	0.123	U	0.123	U	ug/L
103-65-1	n-Propylbenzene	1	1	0.727	U	0.727	U	ug/L
95-47-6	o-Xylene	1	1	0.055	U	0.055	U	ug/L
135-98-8	sec-Butylbenzene	1	1	0.107	U	0.107	U	ug/L
100-42-5	Styrene	1	1	0.089	U	0.089	U	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	1	5	0.078	U	0.078	U	ug/L
98-06-6	tert-Butylbenzene	1	1	0.087	U	0.087	U	ug/L
127-18-4	Tetrachloroethene	1	1	0.193	U	0.193	U	ug/L
108-88-3	Toluene	1	1	0.122	U	0.122	U	ug/L
156-60-5	trans-1,2-Dichloroethene	1	1	0.077	U	0.077	U	ug/L
10061-02-6	trans-1,3-Dichloropropene	1	1	0.128	U	0.128	U	ug/L
79-01-6	Trichloroethene	1	1	0.161	U	0.161	U	ug/L
75-69-4	Trichlorofluoromethane	1	1	0.157	U	0.157	U	ug/L
75-01-4	Vinyl chloride	1	1	0.127	U	0.127	U	ug/L

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MA01MW004-a**
Location ID: **NA**
Lab Sample ID: **21410220505**
Sample Type: **Field Duplicate**
Method: **EPA 8260B**

Sample Matrix : **Water**
Sample Date: **10/21/2014 11:00**
Analysis Date: **10/24/2014 19:32**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	1	0.12	U	0.12	U	ug/L
71-55-6	1,1,1-Trichloroethane	1	1	0.123	U	0.123	U	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	1	0.109	U	0.109	U	ug/L
79-00-5	1,1,2-Trichloroethane	1	1	0.159	U	0.159	U	ug/L
75-34-3	1,1-Dichloroethane	1	1	0.171	U	0.171	U	ug/L
75-35-4	1,1-Dichloroethene	1	1	0.2	U	0.2	U	ug/L
563-58-6	1,1-Dichloropropene	1	1	0.052	U	0.052	U	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	1	0.079	U	0.079	U	ug/L
96-18-4	1,2,3-Trichloropropane	1	1	0.065	U	0.065	U	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	1	0.105	U	0.105	U	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	1	0.084	U	0.084	U	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	1	1	0.194	U	0.194	U	ug/L
106-93-4	1,2-Dibromoethane	1	1	0.102	U	0.102	U	ug/L
95-50-1	1,2-Dichlorobenzene	1	1	0.135	U	0.135	U	ug/L
107-06-2	1,2-Dichloroethane	1	1	0.116	U	0.116	U	ug/L
78-87-5	1,2-Dichloropropane	1	1	0.15	U	0.15	U	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	1	0.066	U	0.066	U	ug/L
541-73-1	1,3-Dichlorobenzene	1	1	0.138	U	0.138	U	ug/L
142-28-9	1,3-Dichloropropane	1	1	0.059	U	0.059	U	ug/L
106-46-7	1,4-Dichlorobenzene	1	1	0.083	U	0.083	U	ug/L
594-20-7	2,2-Dichloropropane	1	1	0.17	U	0.17	U	ug/L
78-93-3	2-Butanone	1	5	0.142	U	0.142	U	ug/L
95-49-8	2-Chlorotoluene	1	1	0.08	U	0.08	U	ug/L
591-78-6	2-Hexanone	1	5	0.122	U	0.122	U	ug/L
106-43-4	4-Chlorotoluene	1	1	0.124	U	0.124	U	ug/L
99-87-6	4-Isopropyltoluene	1	1	0.07	U	0.07	U	ug/L
108-10-1	4-Methyl-2-pentanone	1	5	0.12	U	0.12	U	ug/L
67-64-1	Acetone	1	5	0.193	U	0.193	U	ug/L
71-43-2	Benzene	1	1	0.111	U	0.111	U	ug/L
108-86-1	Bromobenzene	1	1	0.145	U	0.145	U	ug/L
74-97-5	Bromochloromethane	1	1	0.127	U	0.127	U	ug/L
75-27-4	Bromodichloromethane	1	1	0.083	U	0.083	U	ug/L
75-25-2	Bromoform	1	1	0.215	U	0.215	U	ug/L
74-83-9	Bromomethane	1	1	0.427	U	0.427	U	ug/L
75-15-0	Carbon disulfide	1	1	0.19	U	0.19	U	ug/L
56-23-5	Carbon tetrachloride	1	1	0.248	U	0.248	U	ug/L
108-90-7	Chlorobenzene	1	1	0.083	U	0.083	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MA01MW004-a**
Location ID: **NA**
Lab Sample ID: **21410220505**
Sample Type: **Field Duplicate**
Method: **EPA 8260B**

Sample Matrix : **Water**
Sample Date: **10/21/2014 11:00**
Analysis Date: **10/24/2014 19:32**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
75-00-3	Chloroethane	1	1	0.235	U	0.235	U	ug/L
67-66-3	Chloroform	1	1	0.155	U	0.155	U	ug/L
74-87-3	Chloromethane	1	1	0.144	U	0.144	U	ug/L
156-59-2	cis-1,2-Dichloroethene	1	1	0.103	U	0.103	U	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	1	0.124	U	0.124	U	ug/L
74-95-3	Dibromomethane	1	1	0.211	U	0.211	U	ug/L
75-71-8	Dichlorodifluoromethane	1	1	0.145	U	0.145	U	ug/L
100-41-4	Ethylbenzene	1	1	0.109	U	0.109	U	ug/L
87-68-3	Hexachlorobutadiene	1	1	0.265	U	0.265	U	ug/L
98-82-8	Isopropylbenzene (Cumene)	1	1	0.13	U	0.13	U	ug/L
136777-61-2	m,p-Xylene	1	2	0.123	U	0.123	U	ug/L
75-09-2	Methylene chloride	1	5	0.149	U	0.149	U	ug/L
91-20-3	Naphthalene	1	1	0.176	U	0.176	U	ug/L
104-51-8	n-Butylbenzene	1	1	0.123	U	0.123	U	ug/L
103-65-1	n-Propylbenzene	1	1	0.727	U	0.727	U	ug/L
95-47-6	o-Xylene	1	1	0.055	U	0.055	U	ug/L
135-98-8	sec-Butylbenzene	1	1	0.107	U	0.107	U	ug/L
100-42-5	Styrene	1	1	0.089	U	0.089	U	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	1	5	0.078	U	0.078	U	ug/L
98-06-6	tert-Butylbenzene	1	1	0.087	U	0.087	U	ug/L
127-18-4	Tetrachloroethene	1	1	0.193	U	0.193	U	ug/L
108-88-3	Toluene	1	1	0.122	U	0.122	U	ug/L
156-60-5	trans-1,2-Dichloroethene	1	1	0.077	U	0.077	U	ug/L
10061-02-6	trans-1,3-Dichloropropene	1	1	0.128	U	0.128	U	ug/L
79-01-6	Trichloroethene	1	1	0.161	U	0.161	U	ug/L
75-69-4	Trichlorofluoromethane	1	1	0.157	U	0.157	U	ug/L
75-01-4	Vinyl chloride	1	1	0.127	U	0.127	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MA01MW004-c**
Location ID: **NA**
Lab Sample ID: **21410220506**
Sample Type: **Trip Blank**
Method: **EPA 8260B**

Sample Matrix : **Water**
Sample Date: **10/21/2014 11:00**
Analysis Date: **10/24/2014 19:54**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	1	0.12	U	0.12	U	ug/L
71-55-6	1,1,1-Trichloroethane	1	1	0.123	U	0.123	U	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	1	0.109	U	0.109	U	ug/L
79-00-5	1,1,2-Trichloroethane	1	1	0.159	U	0.159	U	ug/L
75-34-3	1,1-Dichloroethane	1	1	0.171	U	0.171	U	ug/L
75-35-4	1,1-Dichloroethene	1	1	0.2	U	0.2	U	ug/L
563-58-6	1,1-Dichloropropene	1	1	0.052	U	0.052	U	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	1	0.079	U	0.079	U	ug/L
96-18-4	1,2,3-Trichloropropane	1	1	0.065	U	0.065	U	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	1	0.105	U	0.105	U	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	1	0.084	U	0.084	U	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	1	1	0.194	U	0.194	U	ug/L
106-93-4	1,2-Dibromoethane	1	1	0.102	U	0.102	U	ug/L
95-50-1	1,2-Dichlorobenzene	1	1	0.135	U	0.135	U	ug/L
107-06-2	1,2-Dichloroethane	1	1	0.116	U	0.116	U	ug/L
78-87-5	1,2-Dichloropropane	1	1	0.15	U	0.15	U	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	1	0.066	U	0.066	U	ug/L
541-73-1	1,3-Dichlorobenzene	1	1	0.138	U	0.138	U	ug/L
142-28-9	1,3-Dichloropropane	1	1	0.059	U	0.059	U	ug/L
106-46-7	1,4-Dichlorobenzene	1	1	0.083	U	0.083	U	ug/L
594-20-7	2,2-Dichloropropane	1	1	0.17	U	0.17	U	ug/L
78-93-3	2-Butanone	1	5	0.142	U	0.142	U	ug/L
95-49-8	2-Chlorotoluene	1	1	0.08	U	0.08	U	ug/L
591-78-6	2-Hexanone	1	5	0.122	U	0.122	U	ug/L
106-43-4	4-Chlorotoluene	1	1	0.124	U	0.124	U	ug/L
99-87-6	4-Isopropyltoluene	1	1	0.07	U	0.07	U	ug/L
108-10-1	4-Methyl-2-pentanone	1	5	0.12	U	0.12	U	ug/L
67-64-1	Acetone	1	5	0.193	U	0.193	U	ug/L
71-43-2	Benzene	1	1	0.111	U	0.111	U	ug/L
108-86-1	Bromobenzene	1	1	0.145	U	0.145	U	ug/L
74-97-5	Bromochloromethane	1	1	0.127	U	0.127	U	ug/L
75-27-4	Bromodichloromethane	1	1	0.083	U	0.083	U	ug/L
75-25-2	Bromoform	1	1	0.215	U	0.215	U	ug/L
74-83-9	Bromomethane	1	1	0.427	U	0.427	U	ug/L
75-15-0	Carbon disulfide	1	1	0.19	U	0.19	U	ug/L
56-23-5	Carbon tetrachloride	1	1	0.248	U	0.248	U	ug/L
108-90-7	Chlorobenzene	1	1	0.083	U	0.083	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MA01MW004-c**
Location ID: **NA**
Lab Sample ID: **21410220506**
Sample Type: **Trip Blank**
Method: **EPA 8260B**

Sample Matrix : **Water**
Sample Date: **10/21/2014 11:00**
Analysis Date: **10/24/2014 19:54**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
75-00-3	Chloroethane	1	1	0.235	U	0.235	U	ug/L
67-66-3	Chloroform	1	1	0.155	U	0.155	U	ug/L
74-87-3	Chloromethane	1	1	0.144	U	0.144	U	ug/L
156-59-2	cis-1,2-Dichloroethene	1	1	0.103	U	0.103	U	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	1	0.124	U	0.124	U	ug/L
74-95-3	Dibromomethane	1	1	0.211	U	0.211	U	ug/L
75-71-8	Dichlorodifluoromethane	1	1	0.145	U	0.145	U	ug/L
100-41-4	Ethylbenzene	1	1	0.109	U	0.109	U	ug/L
87-68-3	Hexachlorobutadiene	1	1	0.265	U	0.265	U	ug/L
98-82-8	Isopropylbenzene (Cumene)	1	1	0.13	U	0.13	U	ug/L
136777-61-2	m,p-Xylene	1	2	0.123	U	0.123	U	ug/L
75-09-2	Methylene chloride	1	5	0.149	U	0.149	U	ug/L
91-20-3	Naphthalene	1	1	0.176	U	0.176	U	ug/L
104-51-8	n-Butylbenzene	1	1	0.123	U	0.123	U	ug/L
103-65-1	n-Propylbenzene	1	1	0.727	U	0.727	U	ug/L
95-47-6	o-Xylene	1	1	0.055	U	0.055	U	ug/L
135-98-8	sec-Butylbenzene	1	1	0.107	U	0.107	U	ug/L
100-42-5	Styrene	1	1	0.089	U	0.089	U	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	1	5	0.078	U	0.078	U	ug/L
98-06-6	tert-Butylbenzene	1	1	0.087	U	0.087	U	ug/L
127-18-4	Tetrachloroethene	1	1	0.193	U	0.193	U	ug/L
108-88-3	Toluene	1	1	0.122	U	0.122	U	ug/L
156-60-5	trans-1,2-Dichloroethene	1	1	0.077	U	0.077	U	ug/L
10061-02-6	trans-1,3-Dichloropropene	1	1	0.128	U	0.128	U	ug/L
79-01-6	Trichloroethene	1	1	0.161	U	0.161	U	ug/L
75-69-4	Trichlorofluoromethane	1	1	0.157	U	0.157	U	ug/L
75-01-4	Vinyl chloride	1	1	0.127	U	0.127	U	ug/L

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MA01MW003**
Location ID: **NA**
Lab Sample ID: **21410220507**
Sample Type: **Site Sample**
Method: **EPA 8260B**

Sample Matrix : **Water**
Sample Date: **10/21/2014 12:26**
Analysis Date: **10/24/2014 20:17**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	1	0.12	U	0.12	U	ug/L
71-55-6	1,1,1-Trichloroethane	1	1	0.123	U	0.123	U	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	1	0.109	U	0.109	U	ug/L
79-00-5	1,1,2-Trichloroethane	1	1	0.159	U	0.159	U	ug/L
75-34-3	1,1-Dichloroethane	1	1	0.171	U	0.171	U	ug/L
75-35-4	1,1-Dichloroethene	1	1	0.2	U	0.2	U	ug/L
563-58-6	1,1-Dichloropropene	1	1	0.052	U	0.052	U	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	1	0.079	U	0.079	U	ug/L
96-18-4	1,2,3-Trichloropropane	1	1	0.065	U	0.065	U	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	1	0.105	U	0.105	U	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	1	0.084	U	0.084	U	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	1	1	0.194	U	0.194	U	ug/L
106-93-4	1,2-Dibromoethane	1	1	0.102	U	0.102	U	ug/L
95-50-1	1,2-Dichlorobenzene	1	1	0.135	U	0.135	U	ug/L
107-06-2	1,2-Dichloroethane	1	1	0.116	U	0.116	U	ug/L
78-87-5	1,2-Dichloropropane	1	1	0.15	U	0.15	U	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	1	0.066	U	0.066	U	ug/L
541-73-1	1,3-Dichlorobenzene	1	1	0.138	U	0.138	U	ug/L
142-28-9	1,3-Dichloropropane	1	1	0.059	U	0.059	U	ug/L
106-46-7	1,4-Dichlorobenzene	1	1	0.083	U	0.083	U	ug/L
594-20-7	2,2-Dichloropropane	1	1	0.17	U	0.17	U	ug/L
78-93-3	2-Butanone	1	5	0.142	U	0.142	U	ug/L
95-49-8	2-Chlorotoluene	1	1	0.08	U	0.08	U	ug/L
591-78-6	2-Hexanone	1	5	0.122	U	0.122	U	ug/L
106-43-4	4-Chlorotoluene	1	1	0.124	U	0.124	U	ug/L
99-87-6	4-Isopropyltoluene	1	1	0.07	U	0.07	U	ug/L
108-10-1	4-Methyl-2-pentanone	1	5	0.12	U	0.12	U	ug/L
67-64-1	Acetone	1	5	0.193	U	0.193	U	ug/L
71-43-2	Benzene	1	1	0.111	U	0.111	U	ug/L
108-86-1	Bromobenzene	1	1	0.145	U	0.145	U	ug/L
74-97-5	Bromochloromethane	1	1	0.127	U	0.127	U	ug/L
75-27-4	Bromodichloromethane	1	1	0.083	U	0.083	U	ug/L
75-25-2	Bromoform	1	1	0.215	U	0.215	U	ug/L
74-83-9	Bromomethane	1	1	0.427	U	0.427	U	ug/L
75-15-0	Carbon disulfide	1	1	0.19	U	0.19	U	ug/L
56-23-5	Carbon tetrachloride	1	1	0.248	U	0.248	U	ug/L
108-90-7	Chlorobenzene	1	1	0.083	U	0.083	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MA01MW003**
Location ID: **NA**
Lab Sample ID: **21410220507**
Sample Type: **Site Sample**
Method: **EPA 8260B**

Sample Matrix : **Water**
Sample Date: **10/21/2014 12:26**
Analysis Date: **10/24/2014 20:17**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
75-00-3	Chloroethane	1	1	0.235	U	0.235	U	ug/L
67-66-3	Chloroform	1	1	0.155	U	0.155	U	ug/L
74-87-3	Chloromethane	1	1	0.144	U	0.144	U	ug/L
156-59-2	cis-1,2-Dichloroethene	1	1	0.103	U	0.103	U	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	1	0.124	U	0.124	U	ug/L
74-95-3	Dibromomethane	1	1	0.211	U	0.211	U	ug/L
75-71-8	Dichlorodifluoromethane	1	1	0.145	U	0.145	U	ug/L
100-41-4	Ethylbenzene	1	1	0.109	U	0.109	U	ug/L
87-68-3	Hexachlorobutadiene	1	1	0.265	U	0.265	U	ug/L
98-82-8	Isopropylbenzene (Cumene)	1	1	0.13	U	0.13	U	ug/L
136777-61-2	m,p-Xylene	1	2	0.123	U	0.123	U	ug/L
75-09-2	Methylene chloride	1	5	0.149	U	0.149	U	ug/L
91-20-3	Naphthalene	1	1	0.176	U	0.176	U	ug/L
104-51-8	n-Butylbenzene	1	1	0.123	U	0.123	U	ug/L
103-65-1	n-Propylbenzene	1	1	0.727	U	0.727	U	ug/L
95-47-6	o-Xylene	1	1	0.055	U	0.055	U	ug/L
135-98-8	sec-Butylbenzene	1	1	0.107	U	0.107	U	ug/L
100-42-5	Styrene	1	1	0.089	U	0.089	U	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	1	5	0.078	U	0.078	U	ug/L
98-06-6	tert-Butylbenzene	1	1	0.087	U	0.087	U	ug/L
127-18-4	Tetrachloroethene	1	1	0.193	U	0.193	U	ug/L
108-88-3	Toluene	1	1	0.122	U	0.122	U	ug/L
156-60-5	trans-1,2-Dichloroethene	1	1	0.077	U	0.077	U	ug/L
10061-02-6	trans-1,3-Dichloropropene	1	1	0.128	U	0.128	U	ug/L
79-01-6	Trichloroethene	1	1	0.161	U	0.161	U	ug/L
75-69-4	Trichlorofluoromethane	1	1	0.157	U	0.157	U	ug/L
75-01-4	Vinyl chloride	1	1	0.127	U	0.127	U	ug/L

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MA01MW003-c**
Location ID: **NA**
Lab Sample ID: **21410220508**
Sample Type: **Trip Blank**
Method: **EPA 8260B**

Sample Matrix : **Water**
Sample Date: **10/21/2014 12:26**
Analysis Date: **10/24/2014 20:40**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	1	0.12	U	0.12	U	ug/L
71-55-6	1,1,1-Trichloroethane	1	1	0.123	U	0.123	U	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	1	0.109	U	0.109	U	ug/L
79-00-5	1,1,2-Trichloroethane	1	1	0.159	U	0.159	U	ug/L
75-34-3	1,1-Dichloroethane	1	1	0.171	U	0.171	U	ug/L
75-35-4	1,1-Dichloroethene	1	1	0.2	U	0.2	U	ug/L
563-58-6	1,1-Dichloropropene	1	1	0.052	U	0.052	U	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	1	0.079	U	0.079	U	ug/L
96-18-4	1,2,3-Trichloropropane	1	1	0.065	U	0.065	U	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	1	0.105	U	0.105	U	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	1	0.084	U	0.084	U	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	1	1	0.194	U	0.194	U	ug/L
106-93-4	1,2-Dibromoethane	1	1	0.102	U	0.102	U	ug/L
95-50-1	1,2-Dichlorobenzene	1	1	0.135	U	0.135	U	ug/L
107-06-2	1,2-Dichloroethane	1	1	0.116	U	0.116	U	ug/L
78-87-5	1,2-Dichloropropane	1	1	0.15	U	0.15	U	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	1	0.066	U	0.066	U	ug/L
541-73-1	1,3-Dichlorobenzene	1	1	0.138	U	0.138	U	ug/L
142-28-9	1,3-Dichloropropane	1	1	0.059	U	0.059	U	ug/L
106-46-7	1,4-Dichlorobenzene	1	1	0.083	U	0.083	U	ug/L
594-20-7	2,2-Dichloropropane	1	1	0.17	U	0.17	U	ug/L
78-93-3	2-Butanone	1	5	0.142	U	0.142	U	ug/L
95-49-8	2-Chlorotoluene	1	1	0.08	U	0.08	U	ug/L
591-78-6	2-Hexanone	1	5	0.122	U	0.122	U	ug/L
106-43-4	4-Chlorotoluene	1	1	0.124	U	0.124	U	ug/L
99-87-6	4-Isopropyltoluene	1	1	0.07	U	0.07	U	ug/L
108-10-1	4-Methyl-2-pentanone	1	5	0.12	U	0.12	U	ug/L
67-64-1	Acetone	1	5	0.193	U	0.193	U	ug/L
71-43-2	Benzene	1	1	0.111	U	0.111	U	ug/L
108-86-1	Bromobenzene	1	1	0.145	U	0.145	U	ug/L
74-97-5	Bromochloromethane	1	1	0.127	U	0.127	U	ug/L
75-27-4	Bromodichloromethane	1	1	0.083	U	0.083	U	ug/L
75-25-2	Bromoform	1	1	0.215	U	0.215	U	ug/L
74-83-9	Bromomethane	1	1	0.427	U	0.427	U	ug/L
75-15-0	Carbon disulfide	1	1	0.19	U	0.19	U	ug/L
56-23-5	Carbon tetrachloride	1	1	0.248	U	0.248	U	ug/L
108-90-7	Chlorobenzene	1	1	0.083	U	0.083	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MA01MW003-c**
Location ID: **NA**
Lab Sample ID: **21410220508**
Sample Type: **Trip Blank**
Method: **EPA 8260B**

Sample Matrix : **Water**
Sample Date: **10/21/2014 12:26**
Analysis Date: **10/24/2014 20:40**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
75-00-3	Chloroethane	1	1	0.235	U	0.235	U	ug/L
67-66-3	Chloroform	1	1	0.155	U	0.155	U	ug/L
74-87-3	Chloromethane	1	1	0.144	U	0.144	U	ug/L
156-59-2	cis-1,2-Dichloroethene	1	1	0.103	U	0.103	U	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	1	0.124	U	0.124	U	ug/L
74-95-3	Dibromomethane	1	1	0.211	U	0.211	U	ug/L
75-71-8	Dichlorodifluoromethane	1	1	0.145	U	0.145	U	ug/L
100-41-4	Ethylbenzene	1	1	0.109	U	0.109	U	ug/L
87-68-3	Hexachlorobutadiene	1	1	0.265	U	0.265	U	ug/L
98-82-8	Isopropylbenzene (Cumene)	1	1	0.13	U	0.13	U	ug/L
136777-61-2	m,p-Xylene	1	2	0.123	U	0.123	U	ug/L
75-09-2	Methylene chloride	1	5	0.149	U	0.149	U	ug/L
91-20-3	Naphthalene	1	1	0.176	U	0.176	U	ug/L
104-51-8	n-Butylbenzene	1	1	0.123	U	0.123	U	ug/L
103-65-1	n-Propylbenzene	1	1	0.727	U	0.727	U	ug/L
95-47-6	o-Xylene	1	1	0.055	U	0.055	U	ug/L
135-98-8	sec-Butylbenzene	1	1	0.107	U	0.107	U	ug/L
100-42-5	Styrene	1	1	0.089	U	0.089	U	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	1	5	0.078	U	0.078	U	ug/L
98-06-6	tert-Butylbenzene	1	1	0.087	U	0.087	U	ug/L
127-18-4	Tetrachloroethene	1	1	0.193	U	0.193	U	ug/L
108-88-3	Toluene	1	1	0.122	U	0.122	U	ug/L
156-60-5	trans-1,2-Dichloroethene	1	1	0.077	U	0.077	U	ug/L
10061-02-6	trans-1,3-Dichloropropene	1	1	0.128	U	0.128	U	ug/L
79-01-6	Trichloroethene	1	1	0.161	U	0.161	U	ug/L
75-69-4	Trichlorofluoromethane	1	1	0.157	U	0.157	U	ug/L
75-01-4	Vinyl chloride	1	1	0.127	U	0.127	U	ug/L

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **M114MW002**
Location ID: **NA**
Lab Sample ID: **21410220509**
Sample Type: **Site Sample**
Method: **EPA 8260B**

Sample Matrix : **Water**
Sample Date: **10/22/2014 9:35**
Analysis Date: **10/24/2014 21:02**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	1	0.12	U	0.12	U	ug/L
71-55-6	1,1,1-Trichloroethane	1	1	0.123	U	0.123	U	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	1	0.109	U	0.109	U	ug/L
79-00-5	1,1,2-Trichloroethane	1	1	0.159	U	0.159	U	ug/L
75-34-3	1,1-Dichloroethane	1	1	0.171	U	0.171	U	ug/L
75-35-4	1,1-Dichloroethene	1	1	0.2	U	0.2	U	ug/L
563-58-6	1,1-Dichloropropene	1	1	0.052	U	0.052	U	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	1	0.079	U	0.079	U	ug/L
96-18-4	1,2,3-Trichloropropane	1	1	0.065	U	0.065	U	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	1	0.105	U	0.105	U	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	1	0.084	U	0.084	U	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	1	1	0.194	U	0.194	U	ug/L
106-93-4	1,2-Dibromoethane	1	1	0.102	U	0.102	U	ug/L
95-50-1	1,2-Dichlorobenzene	1	1	0.135	U	0.135	U	ug/L
107-06-2	1,2-Dichloroethane	1	1	0.116	U	0.116	U	ug/L
78-87-5	1,2-Dichloropropane	1	1	0.15	U	0.15	U	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	1	0.066	U	0.066	U	ug/L
541-73-1	1,3-Dichlorobenzene	1	1	0.138	U	0.138	U	ug/L
142-28-9	1,3-Dichloropropane	1	1	0.059	U	0.059	U	ug/L
106-46-7	1,4-Dichlorobenzene	1	1	0.083	U	0.083	U	ug/L
594-20-7	2,2-Dichloropropane	1	1	0.17	U	0.17	U	ug/L
78-93-3	2-Butanone	1	5	0.142	U	0.142	U	ug/L
95-49-8	2-Chlorotoluene	1	1	0.08	U	0.08	U	ug/L
591-78-6	2-Hexanone	1	5	0.122	U	0.122	U	ug/L
106-43-4	4-Chlorotoluene	1	1	0.124	U	0.124	U	ug/L
99-87-6	4-Isopropyltoluene	1	1	0.07	U	0.07	U	ug/L
108-10-1	4-Methyl-2-pentanone	1	5	0.12	U	0.12	U	ug/L
67-64-1	Acetone	1	5	0.193	U	0.193	U	ug/L
71-43-2	Benzene	1	1	0.111	U	0.111	U	ug/L
108-86-1	Bromobenzene	1	1	0.145	U	0.145	U	ug/L
74-97-5	Bromochloromethane	1	1	0.127	U	0.127	U	ug/L
75-27-4	Bromodichloromethane	1	1	0.083	U	0.083	U	ug/L
75-25-2	Bromoform	1	1	0.215	U	0.215	U	ug/L
74-83-9	Bromomethane	1	1	0.427	U	0.427	U	ug/L
75-15-0	Carbon disulfide	1	1	0.19	U	0.19	U	ug/L
56-23-5	Carbon tetrachloride	1	1	0.248	U	0.248	U	ug/L
108-90-7	Chlorobenzene	1	1	0.083	U	0.083	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **M114MW002**
Location ID: **NA**
Lab Sample ID: **21410220509**
Sample Type: **Site Sample**
Method: **EPA 8260B**

Sample Matrix : **Water**
Sample Date: **10/22/2014 9:35**
Analysis Date: **10/24/2014 21:02**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
75-00-3	Chloroethane	1	1	0.235	U	0.235	U	ug/L
67-66-3	Chloroform	1	1	0.155	U	0.155	U	ug/L
74-87-3	Chloromethane	1	1	0.144	U	0.144	U	ug/L
156-59-2	cis-1,2-Dichloroethene	1	1	0.103	U	0.103	U	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	1	0.124	U	0.124	U	ug/L
74-95-3	Dibromomethane	1	1	0.211	U	0.211	U	ug/L
75-71-8	Dichlorodifluoromethane	1	1	0.145	U	0.145	U	ug/L
100-41-4	Ethylbenzene	1	1	0.109	U	0.109	U	ug/L
87-68-3	Hexachlorobutadiene	1	1	0.265	U	0.265	U	ug/L
98-82-8	Isopropylbenzene (Cumene)	1	1	0.13	U	0.13	U	ug/L
136777-61-2	m,p-Xylene	1	2	0.123	U	0.123	U	ug/L
75-09-2	Methylene chloride	1	5	0.149	U	0.149	U	ug/L
91-20-3	Naphthalene	1	1	0.176	U	0.176	U	ug/L
104-51-8	n-Butylbenzene	1	1	0.123	U	0.123	U	ug/L
103-65-1	n-Propylbenzene	1	1	0.727	U	0.727	U	ug/L
95-47-6	o-Xylene	1	1	0.055	U	0.055	U	ug/L
135-98-8	sec-Butylbenzene	1	1	0.107	U	0.107	U	ug/L
100-42-5	Styrene	1	1	0.089	U	0.089	U	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	1	5	0.078	U	0.078	U	ug/L
98-06-6	tert-Butylbenzene	1	1	0.087	U	0.087	U	ug/L
127-18-4	Tetrachloroethene	1	1	0.193	U	0.193	U	ug/L
108-88-3	Toluene	1	1	0.122	U	0.122	U	ug/L
156-60-5	trans-1,2-Dichloroethene	1	1	0.077	U	0.077	U	ug/L
10061-02-6	trans-1,3-Dichloropropene	1	1	0.128	U	0.128	U	ug/L
79-01-6	Trichloroethene	1	1	0.161	U	0.161	U	ug/L
75-69-4	Trichlorofluoromethane	1	1	0.157	U	0.157	U	ug/L
75-01-4	Vinyl chloride	1	1	0.127	U	0.127	U	ug/L

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **M114MW002-c**
Location ID: **NA**
Lab Sample ID: **21410220510**
Sample Type: **Trip Blank**
Method: **EPA 8260B**

Sample Matrix : **Water**
Sample Date: **10/22/2014 9:35**
Analysis Date: **10/24/2014 21:25**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	1	0.12	U	0.12	U	ug/L
71-55-6	1,1,1-Trichloroethane	1	1	0.123	U	0.123	U	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	1	0.109	U	0.109	U	ug/L
79-00-5	1,1,2-Trichloroethane	1	1	0.159	U	0.159	U	ug/L
75-34-3	1,1-Dichloroethane	1	1	0.171	U	0.171	U	ug/L
75-35-4	1,1-Dichloroethene	1	1	0.2	U	0.2	U	ug/L
563-58-6	1,1-Dichloropropene	1	1	0.052	U	0.052	U	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	1	0.079	U	0.079	U	ug/L
96-18-4	1,2,3-Trichloropropane	1	1	0.065	U	0.065	U	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	1	0.105	U	0.105	U	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	1	0.084	U	0.084	U	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	1	1	0.194	U	0.194	U	ug/L
106-93-4	1,2-Dibromoethane	1	1	0.102	U	0.102	U	ug/L
95-50-1	1,2-Dichlorobenzene	1	1	0.135	U	0.135	U	ug/L
107-06-2	1,2-Dichloroethane	1	1	0.116	U	0.116	U	ug/L
78-87-5	1,2-Dichloropropane	1	1	0.15	U	0.15	U	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	1	0.066	U	0.066	U	ug/L
541-73-1	1,3-Dichlorobenzene	1	1	0.138	U	0.138	U	ug/L
142-28-9	1,3-Dichloropropane	1	1	0.059	U	0.059	U	ug/L
106-46-7	1,4-Dichlorobenzene	1	1	0.083	U	0.083	U	ug/L
594-20-7	2,2-Dichloropropane	1	1	0.17	U	0.17	U	ug/L
78-93-3	2-Butanone	1	5	0.142	U	0.142	U	ug/L
95-49-8	2-Chlorotoluene	1	1	0.08	U	0.08	U	ug/L
591-78-6	2-Hexanone	1	5	0.122	U	0.122	U	ug/L
106-43-4	4-Chlorotoluene	1	1	0.124	U	0.124	U	ug/L
99-87-6	4-Isopropyltoluene	1	1	0.07	U	0.07	U	ug/L
108-10-1	4-Methyl-2-pentanone	1	5	0.12	U	0.12	U	ug/L
67-64-1	Acetone	1	5	0.193	U	0.193	U	ug/L
71-43-2	Benzene	1	1	0.111	U	0.111	U	ug/L
108-86-1	Bromobenzene	1	1	0.145	U	0.145	U	ug/L
74-97-5	Bromochloromethane	1	1	0.127	U	0.127	U	ug/L
75-27-4	Bromodichloromethane	1	1	0.083	U	0.083	U	ug/L
75-25-2	Bromoform	1	1	0.215	U	0.215	U	ug/L
74-83-9	Bromomethane	1	1	0.427	U	0.427	U	ug/L
75-15-0	Carbon disulfide	1	1	0.19	U	0.19	U	ug/L
56-23-5	Carbon tetrachloride	1	1	0.248	U	0.248	U	ug/L
108-90-7	Chlorobenzene	1	1	0.083	U	0.083	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **M114MW002-c**
Location ID: **NA**
Lab Sample ID: **21410220510**
Sample Type: **Trip Blank**
Method: **EPA 8260B**

Sample Matrix : **Water**
Sample Date: **10/22/2014 9:35**
Analysis Date: **10/24/2014 21:25**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
75-00-3	Chloroethane	1	1	0.235	U	0.235	U	ug/L
67-66-3	Chloroform	1	1	0.155	U	0.155	U	ug/L
74-87-3	Chloromethane	1	1	0.144	U	0.144	U	ug/L
156-59-2	cis-1,2-Dichloroethene	1	1	0.103	U	0.103	U	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	1	0.124	U	0.124	U	ug/L
74-95-3	Dibromomethane	1	1	0.211	U	0.211	U	ug/L
75-71-8	Dichlorodifluoromethane	1	1	0.145	U	0.145	U	ug/L
100-41-4	Ethylbenzene	1	1	0.109	U	0.109	U	ug/L
87-68-3	Hexachlorobutadiene	1	1	0.265	U	0.265	U	ug/L
98-82-8	Isopropylbenzene (Cumene)	1	1	0.13	U	0.13	U	ug/L
136777-61-2	m,p-Xylene	1	2	0.123	U	0.123	U	ug/L
75-09-2	Methylene chloride	1	5	0.149	U	0.149	U	ug/L
91-20-3	Naphthalene	1	1	0.176	U	0.176	U	ug/L
104-51-8	n-Butylbenzene	1	1	0.123	U	0.123	U	ug/L
103-65-1	n-Propylbenzene	1	1	0.727	U	0.727	U	ug/L
95-47-6	o-Xylene	1	1	0.055	U	0.055	U	ug/L
135-98-8	sec-Butylbenzene	1	1	0.107	U	0.107	U	ug/L
100-42-5	Styrene	1	1	0.089	U	0.089	U	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	1	5	0.078	U	0.078	U	ug/L
98-06-6	tert-Butylbenzene	1	1	0.087	U	0.087	U	ug/L
127-18-4	Tetrachloroethene	1	1	0.193	U	0.193	U	ug/L
108-88-3	Toluene	1	1	0.122	U	0.122	U	ug/L
156-60-5	trans-1,2-Dichloroethene	1	1	0.077	U	0.077	U	ug/L
10061-02-6	trans-1,3-Dichloropropene	1	1	0.128	U	0.128	U	ug/L
79-01-6	Trichloroethene	1	1	0.161	U	0.161	U	ug/L
75-69-4	Trichlorofluoromethane	1	1	0.157	U	0.157	U	ug/L
75-01-4	Vinyl chloride	1	1	0.127	U	0.127	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **M114MW003**
Location ID: **NA**
Lab Sample ID: **21410220511**
Sample Type: **Site Sample**
Method: **EPA 8260B**

Sample Matrix : **Water**
Sample Date: **10/22/2014 11:10**
Analysis Date: **10/29/2014 23:02**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	1	0.12	U	0.12	U	ug/L
71-55-6	1,1,1-Trichloroethane	1	1	0.123	U	0.123	U	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	1	0.109	U	0.109	U	ug/L
79-00-5	1,1,2-Trichloroethane	1	1	0.159	U	0.159	U	ug/L
75-34-3	1,1-Dichloroethane	1	1	0.171	U	0.171	U	ug/L
75-35-4	1,1-Dichloroethene	1	1	0.2	U	0.2	U	ug/L
563-58-6	1,1-Dichloropropene	1	1	0.052	U	0.052	U	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	1	0.079	U	0.079	U	ug/L
96-18-4	1,2,3-Trichloropropane	1	1	0.065	U	0.065	U	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	1	0.105	U	0.105	U	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	1	0.084	U	0.084	U	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	1	1	0.194	U	0.194	U	ug/L
106-93-4	1,2-Dibromoethane	1	1	0.102	U	0.102	U	ug/L
95-50-1	1,2-Dichlorobenzene	1	1	0.135	U	0.135	U	ug/L
107-06-2	1,2-Dichloroethane	1	1	0.116	U	0.116	U	ug/L
78-87-5	1,2-Dichloropropane	1	1	0.15	U	0.15	U	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	1	0.066	U	0.066	U	ug/L
541-73-1	1,3-Dichlorobenzene	1	1	0.138	U	0.138	U	ug/L
142-28-9	1,3-Dichloropropane	1	1	0.059	U	0.059	U	ug/L
106-46-7	1,4-Dichlorobenzene	1	1	0.083	U	0.083	U	ug/L
594-20-7	2,2-Dichloropropane	1	1	0.17	U	0.17	U	ug/L
78-93-3	2-Butanone	1	5	0.142	U	0.142	U	ug/L
95-49-8	2-Chlorotoluene	1	1	0.08	U	0.08	U	ug/L
591-78-6	2-Hexanone	1	5	0.122	U	0.122	U	ug/L
106-43-4	4-Chlorotoluene	1	1	0.124	U	0.124	U	ug/L
99-87-6	4-Isopropyltoluene	1	1	0.07	U	0.07	U	ug/L
108-10-1	4-Methyl-2-pentanone	1	5	0.12	U	0.12	U	ug/L
67-64-1	Acetone	1	5	0.193	U	0.193	U	ug/L
71-43-2	Benzene	1	1	0.111	U	0.111	U	ug/L
108-86-1	Bromobenzene	1	1	0.145	U	0.145	U	ug/L
74-97-5	Bromochloromethane	1	1	0.127	U	0.127	U	ug/L
75-27-4	Bromodichloromethane	1	1	0.083	U	0.083	U	ug/L
75-25-2	Bromoform	1	1	0.215	U	0.215	U	ug/L
74-83-9	Bromomethane	1	1	0.427	U	0.427	U	ug/L
75-15-0	Carbon disulfide	1	1	0.19	U	0.19	U	ug/L
56-23-5	Carbon tetrachloride	1	1	0.248	U	0.248	U	ug/L
108-90-7	Chlorobenzene	1	1	0.083	U	0.083	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **M114MW003**
Location ID: **NA**
Lab Sample ID: **21410220511**
Sample Type: **Site Sample**
Method: **EPA 8260B**

Sample Matrix : **Water**
Sample Date: **10/22/2014 11:10**
Analysis Date: **10/29/2014 23:02**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
75-00-3	Chloroethane	1	1	0.235	U	0.235	U	ug/L
67-66-3	Chloroform	1	1	0.155	U	0.155	U	ug/L
74-87-3	Chloromethane	1	1	0.144	U	0.144	U	ug/L
156-59-2	cis-1,2-Dichloroethene	1	1	0.103	U	0.103	U	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	1	0.124	U	0.124	U	ug/L
74-95-3	Dibromomethane	1	1	0.211	U	0.211	U	ug/L
75-71-8	Dichlorodifluoromethane	1	1	0.145	U	0.145	U	ug/L
100-41-4	Ethylbenzene	1	1	0.109	U	0.109	U	ug/L
87-68-3	Hexachlorobutadiene	1	1	0.265	U	0.265	U	ug/L
98-82-8	Isopropylbenzene (Cumene)	1	1	0.13	U	0.13	U	ug/L
136777-61-2	m,p-Xylene	1	2	0.123	U	0.123	U	ug/L
75-09-2	Methylene chloride	1	5	0.149	U	0.149	U	ug/L
91-20-3	Naphthalene	1	1	0.176	U	0.176	U	ug/L
104-51-8	n-Butylbenzene	1	1	0.123	U	0.123	U	ug/L
103-65-1	n-Propylbenzene	1	1	0.727	U	0.727	U	ug/L
95-47-6	o-Xylene	1	1	0.055	U	0.055	U	ug/L
135-98-8	sec-Butylbenzene	1	1	0.107	U	0.107	U	ug/L
100-42-5	Styrene	1	1	0.089	U	0.089	U	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	1	5	0.078	U	0.078	U	ug/L
98-06-6	tert-Butylbenzene	1	1	0.087	U	0.087	U	ug/L
127-18-4	Tetrachloroethene	1	1	0.193	U	0.193	U	ug/L
108-88-3	Toluene	1	1	0.122	U	0.122	U	ug/L
156-60-5	trans-1,2-Dichloroethene	1	1	0.077	U	0.077	U	ug/L
10061-02-6	trans-1,3-Dichloropropene	1	1	0.128	U	0.128	U	ug/L
79-01-6	Trichloroethene	1	1	0.161	U	0.161	U	ug/L
75-69-4	Trichlorofluoromethane	1	1	0.157	U	0.157	U	ug/L
75-01-4	Vinyl chloride	1	1	0.127	U	0.127	U	ug/L

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **M114MW004**
Location ID: **NA**
Lab Sample ID: **21410220512**
Sample Type: **Site Sample**
Method: **EPA 8260B**

Sample Matrix : **Water**
Sample Date: **10/22/2014 10:25**
Analysis Date: **10/29/2014 23:22**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	1	0.12	U	0.12	U	ug/L
71-55-6	1,1,1-Trichloroethane	1	1	0.123	U	0.123	U	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	1	0.109	U	0.109	U	ug/L
79-00-5	1,1,2-Trichloroethane	1	1	0.159	U	0.159	U	ug/L
75-34-3	1,1-Dichloroethane	1	1	0.171	U	0.171	U	ug/L
75-35-4	1,1-Dichloroethene	1	1	0.2	U	0.2	U	ug/L
563-58-6	1,1-Dichloropropene	1	1	0.052	U	0.052	U	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	1	0.079	U	0.079	U	ug/L
96-18-4	1,2,3-Trichloropropane	1	1	0.065	U	0.065	U	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	1	0.105	U	0.105	U	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	1	0.084	U	0.084	U	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	1	1	0.194	U	0.194	U	ug/L
106-93-4	1,2-Dibromoethane	1	1	0.102	U	0.102	U	ug/L
95-50-1	1,2-Dichlorobenzene	1	1	0.135	U	0.135	U	ug/L
107-06-2	1,2-Dichloroethane	1	1	0.116	U	0.116	U	ug/L
78-87-5	1,2-Dichloropropane	1	1	0.15	U	0.15	U	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	1	0.066	U	0.066	U	ug/L
541-73-1	1,3-Dichlorobenzene	1	1	0.138	U	0.138	U	ug/L
142-28-9	1,3-Dichloropropane	1	1	0.059	U	0.059	U	ug/L
106-46-7	1,4-Dichlorobenzene	1	1	0.083	U	0.083	U	ug/L
594-20-7	2,2-Dichloropropane	1	1	0.17	U	0.17	U	ug/L
78-93-3	2-Butanone	1	5	0.142	U	0.142	U	ug/L
95-49-8	2-Chlorotoluene	1	1	0.08	U	0.08	U	ug/L
591-78-6	2-Hexanone	1	5	0.122	U	0.122	U	ug/L
106-43-4	4-Chlorotoluene	1	1	0.124	U	0.124	U	ug/L
99-87-6	4-Isopropyltoluene	1	1	0.07	U	0.07	U	ug/L
108-10-1	4-Methyl-2-pentanone	1	5	0.12	U	0.12	U	ug/L
67-64-1	Acetone	1	5	0.193	U	0.193	U	ug/L
71-43-2	Benzene	1	1	0.111	U	0.111	U	ug/L
108-86-1	Bromobenzene	1	1	0.145	U	0.145	U	ug/L
74-97-5	Bromochloromethane	1	1	0.127	U	0.127	U	ug/L
75-27-4	Bromodichloromethane	1	1	0.083	U	0.083	U	ug/L
75-25-2	Bromoform	1	1	0.215	U	0.215	U	ug/L
74-83-9	Bromomethane	1	1	0.427	U	0.427	U	ug/L
75-15-0	Carbon disulfide	1	1	0.19	U	0.19	U	ug/L
56-23-5	Carbon tetrachloride	1	1	0.248	U	0.248	U	ug/L
108-90-7	Chlorobenzene	1	1	0.083	U	0.083	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **M114MW004**
Location ID: **NA**
Lab Sample ID: **21410220512**
Sample Type: **Site Sample**
Method: **EPA 8260B**

Sample Matrix : **Water**
Sample Date: **10/22/2014 10:25**
Analysis Date: **10/29/2014 23:22**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
75-00-3	Chloroethane	1	1	0.235	U	0.235	U	ug/L
67-66-3	Chloroform	1	1	0.155	U	0.155	U	ug/L
74-87-3	Chloromethane	1	1	0.144	U	0.144	U	ug/L
156-59-2	cis-1,2-Dichloroethene	1	1	0.103	U	0.103	U	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	1	0.124	U	0.124	U	ug/L
74-95-3	Dibromomethane	1	1	0.211	U	0.211	U	ug/L
75-71-8	Dichlorodifluoromethane	1	1	0.145	U	0.145	U	ug/L
100-41-4	Ethylbenzene	1	1	0.109	U	0.109	U	ug/L
87-68-3	Hexachlorobutadiene	1	1	0.265	U	0.265	U	ug/L
98-82-8	Isopropylbenzene (Cumene)	1	1	0.13	U	0.13	U	ug/L
136777-61-2	m,p-Xylene	1	2	0.123	U	0.123	U	ug/L
75-09-2	Methylene chloride	1	5	0.149	U	0.149	U	ug/L
91-20-3	Naphthalene	1	1	0.176	U	0.176	U	ug/L
104-51-8	n-Butylbenzene	1	1	0.123	U	0.123	U	ug/L
103-65-1	n-Propylbenzene	1	1	0.727	U	0.727	U	ug/L
95-47-6	o-Xylene	1	1	0.055	U	0.055	U	ug/L
135-98-8	sec-Butylbenzene	1	1	0.107	U	0.107	U	ug/L
100-42-5	Styrene	1	1	0.089	U	0.089	U	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	1	5	0.078	U	0.078	U	ug/L
98-06-6	tert-Butylbenzene	1	1	0.087	U	0.087	U	ug/L
127-18-4	Tetrachloroethene	1	1	0.193	U	0.193	U	ug/L
108-88-3	Toluene	1	1	0.122	U	0.122	U	ug/L
156-60-5	trans-1,2-Dichloroethene	1	1	0.077	U	0.077	U	ug/L
10061-02-6	trans-1,3-Dichloropropene	1	1	0.128	U	0.128	U	ug/L
79-01-6	Trichloroethene	1	1	0.161	U	0.161	U	ug/L
75-69-4	Trichlorofluoromethane	1	1	0.157	U	0.157	U	ug/L
75-01-4	Vinyl chloride	1	1	0.127	U	0.127	U	ug/L

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **M114MW004-c**
Location ID: **NA**
Lab Sample ID: **21410220513**
Sample Type: **Trip Blank**
Method: **EPA 8260B**

Sample Matrix : **Water**
Sample Date: **10/22/2014 10:25**
Analysis Date: **10/29/2014 23:42**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	1	0.12	U	0.12	U	ug/L
71-55-6	1,1,1-Trichloroethane	1	1	0.123	U	0.123	U	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	1	0.109	U	0.109	U	ug/L
79-00-5	1,1,2-Trichloroethane	1	1	0.159	U	0.159	U	ug/L
75-34-3	1,1-Dichloroethane	1	1	0.171	U	0.171	U	ug/L
75-35-4	1,1-Dichloroethene	1	1	0.2	U	0.2	U	ug/L
563-58-6	1,1-Dichloropropene	1	1	0.052	U	0.052	U	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	1	0.079	U	0.079	U	ug/L
96-18-4	1,2,3-Trichloropropane	1	1	0.065	U	0.065	U	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	1	0.105	U	0.105	U	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	1	0.084	U	0.084	U	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	1	1	0.194	U	0.194	U	ug/L
106-93-4	1,2-Dibromoethane	1	1	0.102	U	0.102	U	ug/L
95-50-1	1,2-Dichlorobenzene	1	1	0.135	U	0.135	U	ug/L
107-06-2	1,2-Dichloroethane	1	1	0.116	U	0.116	U	ug/L
78-87-5	1,2-Dichloropropane	1	1	0.15	U	0.15	U	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	1	0.066	U	0.066	U	ug/L
541-73-1	1,3-Dichlorobenzene	1	1	0.138	U	0.138	U	ug/L
142-28-9	1,3-Dichloropropane	1	1	0.059	U	0.059	U	ug/L
106-46-7	1,4-Dichlorobenzene	1	1	0.083	U	0.083	U	ug/L
594-20-7	2,2-Dichloropropane	1	1	0.17	U	0.17	U	ug/L
78-93-3	2-Butanone	1	5	0.142	U	0.142	U	ug/L
95-49-8	2-Chlorotoluene	1	1	0.08	U	0.08	U	ug/L
591-78-6	2-Hexanone	1	5	0.122	U	0.122	U	ug/L
106-43-4	4-Chlorotoluene	1	1	0.124	U	0.124	U	ug/L
99-87-6	4-Isopropyltoluene	1	1	0.07	U	0.07	U	ug/L
108-10-1	4-Methyl-2-pentanone	1	5	0.12	U	0.12	U	ug/L
67-64-1	Acetone	1	5	0.193	U	0.193	U	ug/L
71-43-2	Benzene	1	1	0.111	U	0.111	U	ug/L
108-86-1	Bromobenzene	1	1	0.145	U	0.145	U	ug/L
74-97-5	Bromochloromethane	1	1	0.127	U	0.127	U	ug/L
75-27-4	Bromodichloromethane	1	1	0.083	U	0.083	U	ug/L
75-25-2	Bromoform	1	1	0.215	U	0.215	U	ug/L
74-83-9	Bromomethane	1	1	0.427	U	0.427	U	ug/L
75-15-0	Carbon disulfide	1	1	0.19	U	0.19	U	ug/L
56-23-5	Carbon tetrachloride	1	1	0.248	U	0.248	U	ug/L
108-90-7	Chlorobenzene	1	1	0.083	U	0.083	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **M114MW004-c**
Location ID: **NA**
Lab Sample ID: **21410220513**
Sample Type: **Trip Blank**
Method: **EPA 8260B**

Sample Matrix : **Water**
Sample Date: **10/22/2014 10:25**
Analysis Date: **10/29/2014 23:42**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
75-00-3	Chloroethane	1	1	0.235	U	0.235	U	ug/L
67-66-3	Chloroform	1	1	0.155	U	0.155	U	ug/L
74-87-3	Chloromethane	1	1	0.144	U	0.144	U	ug/L
156-59-2	cis-1,2-Dichloroethene	1	1	0.103	U	0.103	U	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	1	0.124	U	0.124	U	ug/L
74-95-3	Dibromomethane	1	1	0.211	U	0.211	U	ug/L
75-71-8	Dichlorodifluoromethane	1	1	0.145	U	0.145	U	ug/L
100-41-4	Ethylbenzene	1	1	0.109	U	0.109	U	ug/L
87-68-3	Hexachlorobutadiene	1	1	0.265	U	0.265	U	ug/L
98-82-8	Isopropylbenzene (Cumene)	1	1	0.13	U	0.13	U	ug/L
136777-61-2	m,p-Xylene	1	2	0.123	U	0.123	U	ug/L
75-09-2	Methylene chloride	1	5	0.149	U	0.149	U	ug/L
91-20-3	Naphthalene	1	1	0.176	U	0.176	U	ug/L
104-51-8	n-Butylbenzene	1	1	0.123	U	0.123	U	ug/L
103-65-1	n-Propylbenzene	1	1	0.727	U	0.727	U	ug/L
95-47-6	o-Xylene	1	1	0.055	U	0.055	U	ug/L
135-98-8	sec-Butylbenzene	1	1	0.107	U	0.107	U	ug/L
100-42-5	Styrene	1	1	0.089	U	0.089	U	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	1	5	0.078	U	0.078	U	ug/L
98-06-6	tert-Butylbenzene	1	1	0.087	U	0.087	U	ug/L
127-18-4	Tetrachloroethene	1	1	0.193	U	0.193	U	ug/L
108-88-3	Toluene	1	1	0.122	U	0.122	U	ug/L
156-60-5	trans-1,2-Dichloroethene	1	1	0.077	U	0.077	U	ug/L
10061-02-6	trans-1,3-Dichloropropene	1	1	0.128	U	0.128	U	ug/L
79-01-6	Trichloroethene	1	1	0.161	U	0.161	U	ug/L
75-69-4	Trichlorofluoromethane	1	1	0.157	U	0.157	U	ug/L
75-01-4	Vinyl chloride	1	1	0.127	U	0.127	U	ug/L

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **M114MW001**
Location ID: **NA**
Lab Sample ID: **21410220514**
Sample Type: **Site Sample**
Method: **EPA 8260B**

Sample Matrix : **Water**
Sample Date: **10/22/2014 12:35**
Analysis Date: **10/30/2014 0:02**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	1	0.12	U	0.12	U	ug/L
71-55-6	1,1,1-Trichloroethane	1	1	0.123	U	0.123	U	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	1	0.109	U	0.109	U	ug/L
79-00-5	1,1,2-Trichloroethane	1	1	0.159	U	0.159	U	ug/L
75-34-3	1,1-Dichloroethane	1	1	0.171	U	0.171	U	ug/L
75-35-4	1,1-Dichloroethene	1	1	0.2	U	0.2	U	ug/L
563-58-6	1,1-Dichloropropene	1	1	0.052	U	0.052	U	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	1	0.079	U	0.079	U	ug/L
96-18-4	1,2,3-Trichloropropane	1	1	0.065	U	0.065	U	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	1	0.105	U	0.105	U	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	1	0.084	U	0.084	U	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	1	1	0.194	U	0.194	U	ug/L
106-93-4	1,2-Dibromoethane	1	1	0.102	U	0.102	U	ug/L
95-50-1	1,2-Dichlorobenzene	1	1	0.135	U	0.135	U	ug/L
107-06-2	1,2-Dichloroethane	1	1	0.116	U	0.116	U	ug/L
78-87-5	1,2-Dichloropropane	1	1	0.15	U	0.15	U	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	1	0.066	U	0.066	U	ug/L
541-73-1	1,3-Dichlorobenzene	1	1	0.138	U	0.138	U	ug/L
142-28-9	1,3-Dichloropropane	1	1	0.059	U	0.059	U	ug/L
106-46-7	1,4-Dichlorobenzene	1	1	0.083	U	0.083	U	ug/L
594-20-7	2,2-Dichloropropane	1	1	0.17	U	0.17	U	ug/L
78-93-3	2-Butanone	1	5	0.142	U	0.142	U	ug/L
95-49-8	2-Chlorotoluene	1	1	0.08	U	0.08	U	ug/L
591-78-6	2-Hexanone	1	5	0.122	U	0.122	U	ug/L
106-43-4	4-Chlorotoluene	1	1	0.124	U	0.124	U	ug/L
99-87-6	4-Isopropyltoluene	1	1	0.07	U	0.07	U	ug/L
108-10-1	4-Methyl-2-pentanone	1	5	0.12	U	0.12	U	ug/L
67-64-1	Acetone	1	5	0.193	U	0.193	U	ug/L
71-43-2	Benzene	1	1	0.111	U	0.111	U	ug/L
108-86-1	Bromobenzene	1	1	0.145	U	0.145	U	ug/L
74-97-5	Bromochloromethane	1	1	0.127	U	0.127	U	ug/L
75-27-4	Bromodichloromethane	1	1	0.083	U	0.083	U	ug/L
75-25-2	Bromoform	1	1	0.215	U	0.215	U	ug/L
74-83-9	Bromomethane	1	1	0.427	U	0.427	U	ug/L
75-15-0	Carbon disulfide	1	1	0.19	U	0.19	U	ug/L
56-23-5	Carbon tetrachloride	1	1	0.248	U	0.248	U	ug/L
108-90-7	Chlorobenzene	1	1	0.083	U	0.083	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **M114MW001**
Location ID: **NA**
Lab Sample ID: **21410220514**
Sample Type: **Site Sample**
Method: **EPA 8260B**

Sample Matrix : **Water**
Sample Date: **10/22/2014 12:35**
Analysis Date: **10/30/2014 0:02**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
75-00-3	Chloroethane	1	1	0.235	U	0.235	U	ug/L
67-66-3	Chloroform	1	1	0.155	U	0.155	U	ug/L
74-87-3	Chloromethane	1	1	0.144	U	0.144	U	ug/L
156-59-2	cis-1,2-Dichloroethene	1	1	0.103	U	0.103	U	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	1	0.124	U	0.124	U	ug/L
74-95-3	Dibromomethane	1	1	0.211	U	0.211	U	ug/L
75-71-8	Dichlorodifluoromethane	1	1	0.145	U	0.145	U	ug/L
100-41-4	Ethylbenzene	1	1	0.109	U	0.109	U	ug/L
87-68-3	Hexachlorobutadiene	1	1	0.265	U	0.265	U	ug/L
98-82-8	Isopropylbenzene (Cumene)	1	1	0.13	U	0.13	U	ug/L
136777-61-2	m,p-Xylene	1	2	0.123	U	0.123	U	ug/L
75-09-2	Methylene chloride	1	5	0.149	U	0.149	U	ug/L
91-20-3	Naphthalene	1	1	0.176	U	0.176	U	ug/L
104-51-8	n-Butylbenzene	1	1	0.123	U	0.123	U	ug/L
103-65-1	n-Propylbenzene	1	1	0.727	U	0.727	U	ug/L
95-47-6	o-Xylene	1	1	0.055	U	0.055	U	ug/L
135-98-8	sec-Butylbenzene	1	1	0.107	U	0.107	U	ug/L
100-42-5	Styrene	1	1	0.089	U	0.089	U	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	1	5	0.078	U	0.078	U	ug/L
98-06-6	tert-Butylbenzene	1	1	0.087	U	0.087	U	ug/L
127-18-4	Tetrachloroethene	1	1	0.193	U	0.193	U	ug/L
108-88-3	Toluene	1	1	0.122	U	0.122	U	ug/L
156-60-5	trans-1,2-Dichloroethene	1	1	0.077	U	0.077	U	ug/L
10061-02-6	trans-1,3-Dichloropropene	1	1	0.128	U	0.128	U	ug/L
79-01-6	Trichloroethene	1	1	0.161	U	0.161	U	ug/L
75-69-4	Trichlorofluoromethane	1	1	0.157	U	0.157	U	ug/L
75-01-4	Vinyl chloride	1	1	0.127	U	0.127	U	ug/L

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MWQ-24**
Location ID: **NA**
Lab Sample ID: **21410220515**
Sample Type: **Site Sample**
Method: **EPA 8260B**

Sample Matrix : **Water**
Sample Date: **10/23/2014 9:32**
Analysis Date: **10/29/2014 21:41**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	1	0.12	U	0.12	U	ug/L
71-55-6	1,1,1-Trichloroethane	1	1	0.123	U	0.123	U	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	1	0.109	U	0.109	U	ug/L
79-00-5	1,1,2-Trichloroethane	1	1	0.159	U	0.159	U	ug/L
75-34-3	1,1-Dichloroethane	1	1	0.171	U	0.171	U	ug/L
75-35-4	1,1-Dichloroethene	1	1	0.2	U	0.2	U	ug/L
563-58-6	1,1-Dichloropropene	1	1	0.052	U	0.052	U	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	1	0.079	U	0.079	U	ug/L
96-18-4	1,2,3-Trichloropropane	1	1	0.065	U	0.065	U	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	1	0.105	U	0.105	U	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	1	0.084	U	0.084	U	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	1	1	0.194	U	0.194	U	ug/L
106-93-4	1,2-Dibromoethane	1	1	0.102	U	0.102	U	ug/L
95-50-1	1,2-Dichlorobenzene	1	1	0.135	U	0.135	U	ug/L
107-06-2	1,2-Dichloroethane	1	1	0.116	U	0.116	U	ug/L
78-87-5	1,2-Dichloropropane	1	1	0.15	U	0.15	U	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	1	0.066	U	0.066	U	ug/L
541-73-1	1,3-Dichlorobenzene	1	1	0.138	U	0.138	U	ug/L
142-28-9	1,3-Dichloropropane	1	1	0.059	U	0.059	U	ug/L
106-46-7	1,4-Dichlorobenzene	1	1	0.083	U	0.083	U	ug/L
594-20-7	2,2-Dichloropropane	1	1	0.17	U	0.17	U	ug/L
78-93-3	2-Butanone	1	5	0.142	U	0.142	U	ug/L
95-49-8	2-Chlorotoluene	1	1	0.08	U	0.08	U	ug/L
591-78-6	2-Hexanone	1	5	0.122	U	0.122	U	ug/L
106-43-4	4-Chlorotoluene	1	1	0.124	U	0.124	U	ug/L
99-87-6	4-Isopropyltoluene	1	1	0.07	U	0.07	U	ug/L
108-10-1	4-Methyl-2-pentanone	1	5	0.12	U	0.12	U	ug/L
67-64-1	Acetone	1	5	0.193	U	0.193	U	ug/L
71-43-2	Benzene	1	1	0.111	U	0.111	U	ug/L
108-86-1	Bromobenzene	1	1	0.145	U	0.145	U	ug/L
74-97-5	Bromochloromethane	1	1	0.127	U	0.127	U	ug/L
75-27-4	Bromodichloromethane	1	1	0.083	U	0.083	U	ug/L
75-25-2	Bromoform	1	1	0.215	U	0.215	U	ug/L
74-83-9	Bromomethane	1	1	0.427	U	0.427	U	ug/L
75-15-0	Carbon disulfide	1	1	0.19	U	0.19	U	ug/L
56-23-5	Carbon tetrachloride	1	1	0.248	U	0.248	U	ug/L
108-90-7	Chlorobenzene	1	1	0.083	U	0.083	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MWQ-24**
Location ID: **NA**
Lab Sample ID: **21410220515**
Sample Type: **Site Sample**
Method: **EPA 8260B**

Sample Matrix : **Water**
Sample Date: **10/23/2014 9:32**
Analysis Date: **10/29/2014 21:41**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
75-00-3	Chloroethane	1	1	0.235	U	0.235	U	ug/L
67-66-3	Chloroform	1	1	0.155	U	0.155	U	ug/L
74-87-3	Chloromethane	1	1	0.144	U	0.144	U	ug/L
156-59-2	cis-1,2-Dichloroethene	1	1	0.103	U	0.103	U	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	1	0.124	U	0.124	U	ug/L
74-95-3	Dibromomethane	1	1	0.211	U	0.211	U	ug/L
75-71-8	Dichlorodifluoromethane	1	1	0.145	U	0.145	U	ug/L
100-41-4	Ethylbenzene	1	1	0.109	U	0.109	U	ug/L
87-68-3	Hexachlorobutadiene	1	1	0.265	U	0.265	U	ug/L
98-82-8	Isopropylbenzene (Cumene)	1	1	0.13	U	0.13	U	ug/L
136777-61-2	m,p-Xylene	1	2	0.123	U	0.123	U	ug/L
75-09-2	Methylene chloride	1	5	0.149	U	0.149	U	ug/L
91-20-3	Naphthalene	1	1	0.176	U	0.176	U	ug/L
104-51-8	n-Butylbenzene	1	1	0.123	U	0.123	U	ug/L
103-65-1	n-Propylbenzene	1	1	0.727	U	0.727	U	ug/L
95-47-6	o-Xylene	1	1	0.055	U	0.055	U	ug/L
135-98-8	sec-Butylbenzene	1	1	0.107	U	0.107	U	ug/L
100-42-5	Styrene	1	1	0.089	U	0.089	U	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	1	5	0.078	U	0.078	U	ug/L
98-06-6	tert-Butylbenzene	1	1	0.087	U	0.087	U	ug/L
127-18-4	Tetrachloroethene	1	1	0.193	U	0.193	U	ug/L
108-88-3	Toluene	1	1	0.122	U	0.122	U	ug/L
156-60-5	trans-1,2-Dichloroethene	1	1	0.077	U	0.077	U	ug/L
10061-02-6	trans-1,3-Dichloropropene	1	1	0.128	U	0.128	U	ug/L
79-01-6	Trichloroethene	1	1	0.161	U	0.161	U	ug/L
75-69-4	Trichlorofluoromethane	1	1	0.157	U	0.157	U	ug/L
75-01-4	Vinyl chloride	1	1	0.127	U	0.127	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MWQ-24-c**
Location ID: **NA**
Lab Sample ID: **21410220519**
Sample Type: **Trip Blank**
Method: **EPA 8260B**

Sample Matrix : **Water**
Sample Date: **10/23/2014 9:32**
Analysis Date: **10/30/2014 0:22**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	1	0.12	U	0.12	U	ug/L
71-55-6	1,1,1-Trichloroethane	1	1	0.123	U	0.123	U	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	1	0.109	U	0.109	U	ug/L
79-00-5	1,1,2-Trichloroethane	1	1	0.159	U	0.159	U	ug/L
75-34-3	1,1-Dichloroethane	1	1	0.171	U	0.171	U	ug/L
75-35-4	1,1-Dichloroethene	1	1	0.2	U	0.2	U	ug/L
563-58-6	1,1-Dichloropropene	1	1	0.052	U	0.052	U	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	1	0.079	U	0.079	U	ug/L
96-18-4	1,2,3-Trichloropropane	1	1	0.065	U	0.065	U	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	1	0.105	U	0.105	U	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	1	0.084	U	0.084	U	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	1	1	0.194	U	0.194	U	ug/L
106-93-4	1,2-Dibromoethane	1	1	0.102	U	0.102	U	ug/L
95-50-1	1,2-Dichlorobenzene	1	1	0.135	U	0.135	U	ug/L
107-06-2	1,2-Dichloroethane	1	1	0.116	U	0.116	U	ug/L
78-87-5	1,2-Dichloropropane	1	1	0.15	U	0.15	U	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	1	0.066	U	0.066	U	ug/L
541-73-1	1,3-Dichlorobenzene	1	1	0.138	U	0.138	U	ug/L
142-28-9	1,3-Dichloropropane	1	1	0.059	U	0.059	U	ug/L
106-46-7	1,4-Dichlorobenzene	1	1	0.083	U	0.083	U	ug/L
594-20-7	2,2-Dichloropropane	1	1	0.17	U	0.17	U	ug/L
78-93-3	2-Butanone	1	5	0.142	U	0.142	U	ug/L
95-49-8	2-Chlorotoluene	1	1	0.08	U	0.08	U	ug/L
591-78-6	2-Hexanone	1	5	0.122	U	0.122	U	ug/L
106-43-4	4-Chlorotoluene	1	1	0.124	U	0.124	U	ug/L
99-87-6	4-Isopropyltoluene	1	1	0.07	U	0.07	U	ug/L
108-10-1	4-Methyl-2-pentanone	1	5	0.12	U	0.12	U	ug/L
67-64-1	Acetone	1	5	0.193	U	0.193	U	ug/L
71-43-2	Benzene	1	1	0.111	U	0.111	U	ug/L
108-86-1	Bromobenzene	1	1	0.145	U	0.145	U	ug/L
74-97-5	Bromochloromethane	1	1	0.127	U	0.127	U	ug/L
75-27-4	Bromodichloromethane	1	1	0.083	U	0.083	U	ug/L
75-25-2	Bromoform	1	1	0.215	U	0.215	U	ug/L
74-83-9	Bromomethane	1	1	0.427	U	0.427	U	ug/L
75-15-0	Carbon disulfide	1	1	0.19	U	0.19	U	ug/L
56-23-5	Carbon tetrachloride	1	1	0.248	U	0.248	U	ug/L
108-90-7	Chlorobenzene	1	1	0.083	U	0.083	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MWQ-24-c**
Location ID: **NA**
Lab Sample ID: **21410220519**
Sample Type: **Trip Blank**
Method: **EPA 8260B**

Sample Matrix : **Water**
Sample Date: **10/23/2014 9:32**
Analysis Date: **10/30/2014 0:22**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
75-00-3	Chloroethane	1	1	0.235	U	0.235	U	ug/L
67-66-3	Chloroform	1	1	0.155	U	0.155	U	ug/L
74-87-3	Chloromethane	1	1	0.144	U	0.144	U	ug/L
156-59-2	cis-1,2-Dichloroethene	1	1	0.103	U	0.103	U	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	1	0.124	U	0.124	U	ug/L
74-95-3	Dibromomethane	1	1	0.211	U	0.211	U	ug/L
75-71-8	Dichlorodifluoromethane	1	1	0.145	U	0.145	U	ug/L
100-41-4	Ethylbenzene	1	1	0.109	U	0.109	U	ug/L
87-68-3	Hexachlorobutadiene	1	1	0.265	U	0.265	U	ug/L
98-82-8	Isopropylbenzene (Cumene)	1	1	0.13	U	0.13	U	ug/L
136777-61-2	m,p-Xylene	1	2	0.123	U	0.123	U	ug/L
75-09-2	Methylene chloride	1	5	0.149	U	0.149	U	ug/L
91-20-3	Naphthalene	1	1	0.176	U	0.176	U	ug/L
104-51-8	n-Butylbenzene	1	1	0.123	U	0.123	U	ug/L
103-65-1	n-Propylbenzene	1	1	0.727	U	0.727	U	ug/L
95-47-6	o-Xylene	1	1	0.055	U	0.055	U	ug/L
135-98-8	sec-Butylbenzene	1	1	0.107	U	0.107	U	ug/L
100-42-5	Styrene	1	1	0.089	U	0.089	U	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	1	5	0.078	U	0.078	U	ug/L
98-06-6	tert-Butylbenzene	1	1	0.087	U	0.087	U	ug/L
127-18-4	Tetrachloroethene	1	1	0.193	U	0.193	U	ug/L
108-88-3	Toluene	1	1	0.122	U	0.122	U	ug/L
156-60-5	trans-1,2-Dichloroethene	1	1	0.077	U	0.077	U	ug/L
10061-02-6	trans-1,3-Dichloropropene	1	1	0.128	U	0.128	U	ug/L
79-01-6	Trichloroethene	1	1	0.161	U	0.161	U	ug/L
75-69-4	Trichlorofluoromethane	1	1	0.157	U	0.157	U	ug/L
75-01-4	Vinyl chloride	1	1	0.127	U	0.127	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MA02MW001D**
Location ID: **NA**
Lab Sample ID: **21410220520**
Sample Type: **Site Sample**
Method: **EPA 8260B**

Sample Matrix : **Water**
Sample Date: **10/23/2014 11:43**
Analysis Date: **10/30/2014 0:42**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	1	0.12	U	0.12	U	ug/L
71-55-6	1,1,1-Trichloroethane	1	1	0.123	U	0.123	U	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	1	0.109	U	0.109	U	ug/L
79-00-5	1,1,2-Trichloroethane	1	1	0.159	U	0.159	U	ug/L
75-34-3	1,1-Dichloroethane	1	1	0.171	U	0.171	U	ug/L
75-35-4	1,1-Dichloroethene	1	1	0.2	U	0.2	U	ug/L
563-58-6	1,1-Dichloropropene	1	1	0.052	U	0.052	U	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	1	0.079	U	0.079	U	ug/L
96-18-4	1,2,3-Trichloropropane	1	1	0.065	U	0.065	U	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	1	0.105	U	0.105	U	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	1	0.084	U	0.084	U	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	1	1	0.194	U	0.194	U	ug/L
106-93-4	1,2-Dibromoethane	1	1	0.102	U	0.102	U	ug/L
95-50-1	1,2-Dichlorobenzene	1	1	0.135	U	0.135	U	ug/L
107-06-2	1,2-Dichloroethane	1	1	0.116	U	0.116	U	ug/L
78-87-5	1,2-Dichloropropane	1	1	0.15	U	0.15	U	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	1	0.066	U	0.066	U	ug/L
541-73-1	1,3-Dichlorobenzene	1	1	0.138	U	0.138	U	ug/L
142-28-9	1,3-Dichloropropane	1	1	0.059	U	0.059	U	ug/L
106-46-7	1,4-Dichlorobenzene	1	1	0.083	U	0.083	U	ug/L
594-20-7	2,2-Dichloropropane	1	1	0.17	U	0.17	U	ug/L
78-93-3	2-Butanone	1	5	0.142	U	0.142	U	ug/L
95-49-8	2-Chlorotoluene	1	1	0.08	U	0.08	U	ug/L
591-78-6	2-Hexanone	1	5	0.122	U	0.122	U	ug/L
106-43-4	4-Chlorotoluene	1	1	0.124	U	0.124	U	ug/L
99-87-6	4-Isopropyltoluene	1	1	0.07	U	0.07	U	ug/L
108-10-1	4-Methyl-2-pentanone	1	5	0.12	U	0.12	U	ug/L
67-64-1	Acetone	1	5	0.193	U	0.193	U	ug/L
71-43-2	Benzene	1	1	0.111	U	0.111	U	ug/L
108-86-1	Bromobenzene	1	1	0.145	U	0.145	U	ug/L
74-97-5	Bromochloromethane	1	1	0.127	U	0.127	U	ug/L
75-27-4	Bromodichloromethane	1	1	0.083	U	0.083	U	ug/L
75-25-2	Bromoform	1	1	0.215	U	0.215	U	ug/L
74-83-9	Bromomethane	1	1	0.427	U	0.427	U	ug/L
75-15-0	Carbon disulfide	1	1	0.19	U	0.19	U	ug/L
56-23-5	Carbon tetrachloride	1	1	0.248	U	0.248	U	ug/L
108-90-7	Chlorobenzene	1	1	0.083	U	0.083	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MA02MW001D**
Location ID: **NA**
Lab Sample ID: **21410220520**
Sample Type: **Site Sample**
Method: **EPA 8260B**

Sample Matrix : **Water**
Sample Date: **10/23/2014 11:43**
Analysis Date: **10/30/2014 0:42**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
75-00-3	Chloroethane	1	1	0.235	U	0.235	U	ug/L
67-66-3	Chloroform	1	1	0.155	U	0.155	U	ug/L
74-87-3	Chloromethane	1	1	0.144	U	0.144	U	ug/L
156-59-2	cis-1,2-Dichloroethene	1	1	0.103	U	0.103	U	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	1	0.124	U	0.124	U	ug/L
74-95-3	Dibromomethane	1	1	0.211	U	0.211	U	ug/L
75-71-8	Dichlorodifluoromethane	1	1	0.145	U	0.145	U	ug/L
100-41-4	Ethylbenzene	1	1	0.109	U	0.109	U	ug/L
87-68-3	Hexachlorobutadiene	1	1	0.265	U	0.265	U	ug/L
98-82-8	Isopropylbenzene (Cumene)	1	1	0.13	U	0.13	U	ug/L
136777-61-2	m,p-Xylene	1	2	0.123	U	0.123	U	ug/L
75-09-2	Methylene chloride	1	5	0.149	U	0.149	U	ug/L
91-20-3	Naphthalene	1	1	0.176	U	0.176	U	ug/L
104-51-8	n-Butylbenzene	1	1	0.123	U	0.123	U	ug/L
103-65-1	n-Propylbenzene	1	1	0.727	U	0.727	U	ug/L
95-47-6	o-Xylene	1	1	0.055	U	0.055	U	ug/L
135-98-8	sec-Butylbenzene	1	1	0.107	U	0.107	U	ug/L
100-42-5	Styrene	1	1	0.089	U	0.089	U	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	1	5	0.078	U	0.078	U	ug/L
98-06-6	tert-Butylbenzene	1	1	0.087	U	0.087	U	ug/L
127-18-4	Tetrachloroethene	1	1	0.193	U	0.193	U	ug/L
108-88-3	Toluene	1	1	0.122	U	0.122	U	ug/L
156-60-5	trans-1,2-Dichloroethene	1	1	0.077	U	0.077	U	ug/L
10061-02-6	trans-1,3-Dichloropropene	1	1	0.128	U	0.128	U	ug/L
79-01-6	Trichloroethene	1	1	0.161	U	0.161	U	ug/L
75-69-4	Trichlorofluoromethane	1	1	0.157	U	0.157	U	ug/L
75-01-4	Vinyl chloride	1	1	0.127	U	0.127	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MA02MW001D-c**
Location ID: **NA**
Lab Sample ID: **21410220521**
Sample Type: **Trip Blank**
Method: **EPA 8260B**

Sample Matrix : **Water**
Sample Date: **10/23/2014 11:43**
Analysis Date: **10/31/2014 0:57**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	1	0.12	U	0.12	U	ug/L
71-55-6	1,1,1-Trichloroethane	1	1	0.123	U	0.123	U	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1	1	0.109	U	0.109	U	ug/L
79-00-5	1,1,2-Trichloroethane	1	1	0.159	U	0.159	U	ug/L
75-34-3	1,1-Dichloroethane	1	1	0.171	U	0.171	U	ug/L
75-35-4	1,1-Dichloroethene	1	1	0.2	U	0.2	U	ug/L
563-58-6	1,1-Dichloropropene	1	1	0.052	U	0.052	U	ug/L
87-61-6	1,2,3-Trichlorobenzene	1	1	0.079	U	0.079	U	ug/L
96-18-4	1,2,3-Trichloropropane	1	1	0.065	U	0.065	U	ug/L
120-82-1	1,2,4-Trichlorobenzene	1	1	0.105	U	0.105	U	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	1	0.084	U	0.084	U	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	1	1	0.194	U	0.194	U	ug/L
106-93-4	1,2-Dibromoethane	1	1	0.102	U	0.102	U	ug/L
95-50-1	1,2-Dichlorobenzene	1	1	0.135	U	0.135	U	ug/L
107-06-2	1,2-Dichloroethane	1	1	0.116	U	0.116	U	ug/L
78-87-5	1,2-Dichloropropane	1	1	0.15	U	0.15	U	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	1	0.066	U	0.066	U	ug/L
541-73-1	1,3-Dichlorobenzene	1	1	0.138	U	0.138	U	ug/L
142-28-9	1,3-Dichloropropane	1	1	0.059	U	0.059	U	ug/L
106-46-7	1,4-Dichlorobenzene	1	1	0.083	U	0.083	U	ug/L
594-20-7	2,2-Dichloropropane	1	1	0.17	U	0.17	U	ug/L
78-93-3	2-Butanone	1	5	0.142	U	0.142	U	ug/L
95-49-8	2-Chlorotoluene	1	1	0.08	U	0.08	U	ug/L
591-78-6	2-Hexanone	1	5	0.122	U	0.122	U	ug/L
106-43-4	4-Chlorotoluene	1	1	0.124	U	0.124	U	ug/L
99-87-6	4-Isopropyltoluene	1	1	0.07	U	0.07	U	ug/L
108-10-1	4-Methyl-2-pentanone	1	5	0.12	U	0.12	U	ug/L
67-64-1	Acetone	1	5	0.193	UQ	0.193	UQ	ug/L
71-43-2	Benzene	1	1	0.111	U	0.111	U	ug/L
108-86-1	Bromobenzene	1	1	0.145	U	0.145	U	ug/L
74-97-5	Bromochloromethane	1	1	0.127	U	0.127	U	ug/L
75-27-4	Bromodichloromethane	1	1	0.083	U	0.083	U	ug/L
75-25-2	Bromoform	1	1	0.215	U	0.215	U	ug/L
74-83-9	Bromomethane	1	1	0.427	U	0.427	U	ug/L
75-15-0	Carbon disulfide	1	1	0.19	U	0.19	U	ug/L
56-23-5	Carbon tetrachloride	1	1	0.248	U	0.248	U	ug/L
108-90-7	Chlorobenzene	1	1	0.083	U	0.083	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Volatiles

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MA02MW001D-c**
Location ID: **NA**
Lab Sample ID: **21410220521**
Sample Type: **Trip Blank**
Method: **EPA 8260B**

Sample Matrix : **Water**
Sample Date: **10/23/2014 11:43**
Analysis Date: **10/31/2014 0:57**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
75-00-3	Chloroethane	1	1	0.235	U	0.235	U	ug/L
67-66-3	Chloroform	1	1	0.155	U	0.155	U	ug/L
74-87-3	Chloromethane	1	1	0.144	U	0.144	U	ug/L
156-59-2	cis-1,2-Dichloroethene	1	1	0.103	U	0.103	U	ug/L
10061-01-5	cis-1,3-Dichloropropene	1	1	0.124	U	0.124	U	ug/L
74-95-3	Dibromomethane	1	1	0.211	U	0.211	U	ug/L
75-71-8	Dichlorodifluoromethane	1	1	0.145	U	0.145	U	ug/L
100-41-4	Ethylbenzene	1	1	0.109	U	0.109	U	ug/L
87-68-3	Hexachlorobutadiene	1	1	0.265	U	0.265	U	ug/L
98-82-8	Isopropylbenzene (Cumene)	1	1	0.13	U	0.13	U	ug/L
136777-61-2	m,p-Xylene	1	2	0.123	U	0.123	U	ug/L
75-09-2	Methylene chloride	1	5	0.149	U	0.149	U	ug/L
91-20-3	Naphthalene	1	1	0.176	U	0.176	U	ug/L
104-51-8	n-Butylbenzene	1	1	0.123	U	0.123	U	ug/L
103-65-1	n-Propylbenzene	1	1	0.727	U	0.727	U	ug/L
95-47-6	o-Xylene	1	1	0.055	U	0.055	U	ug/L
135-98-8	sec-Butylbenzene	1	1	0.107	U	0.107	U	ug/L
100-42-5	Styrene	1	1	0.089	U	0.089	U	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	1	5	0.078	U	0.078	U	ug/L
98-06-6	tert-Butylbenzene	1	1	0.087	U	0.087	U	ug/L
127-18-4	Tetrachloroethene	1	1	0.193	U	0.193	U	ug/L
108-88-3	Toluene	1	1	0.122	U	0.122	U	ug/L
156-60-5	trans-1,2-Dichloroethene	1	1	0.077	U	0.077	U	ug/L
10061-02-6	trans-1,3-Dichloropropene	1	1	0.128	U	0.128	U	ug/L
79-01-6	Trichloroethene	1	1	0.161	U	0.161	U	ug/L
75-69-4	Trichlorofluoromethane	1	1	0.157	U	0.157	U	ug/L
75-01-4	Vinyl chloride	1	1	0.127	U	0.127	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Explosives

Melrose AFB
Melrose AFB Semi-Annual
SDG: 214102205

COC Sample ID: **MA01MW002**
Location ID: **NA**
Lab Sample ID: **21410220501**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/21/2014 10:40**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
99-35-4	1,3,5-Trinitrobenzene	EPA 8330A	10/27/2014 3:45	1	1	0.15	UQ	0.15	UJ	ug/L	*
99-65-0	1,3-Dinitrobenzene	EPA 8330A	10/27/2014 3:45	1	1	0.15	U	0.15	U	ug/L	
118-96-7	2,4,6-Trinitrotoluene	EPA 8330A	10/27/2014 3:45	1	1	0.27	U	0.27	U	ug/L	
121-14-2	2,4-Dinitrotoluene	EPA 8330A	10/27/2014 3:45	1	1	0.29	U	0.29	U	ug/L	
606-20-2	2,6-Dinitrotoluene	EPA 8330A	10/27/2014 3:45	1	1	0.26	U	0.26	U	ug/L	
35572-78-2	2-Amino-4,6-dinitrotoluene	EPA 8330A	10/27/2014 3:45	1	1	0.3	U	0.3	U	ug/L	
88-72-2	2-Nitrotoluene	EPA 8330A	10/27/2014 3:45	1	1	0.17	U	0.17	U	ug/L	
99-08-1	3-Nitrotoluene	EPA 8330A	10/27/2014 3:45	1	1	0.33	U	0.33	U	ug/L	
19406-51-0	4-Amino-2,6-dinitrotoluene	EPA 8330A	10/27/2014 3:45	1	1	0.36	U	0.36	U	ug/L	
99-99-0	4-Nitrotoluene	EPA 8330A	10/27/2014 3:45	1	1	0.42	U	0.42	U	ug/L	
2691-41-0	HMX	EPA 8330A	10/27/2014 3:45	1	1	0.13	U	0.13	U	ug/L	
98-95-3	Nitrobenzene	EPA 8330A	10/27/2014 3:45	1	1	0.23	U	0.23	U	ug/L	
55-63-0	Nitroglycerin	EPA 8330A	10/27/2014 3:45	1	1	0.38	U	0.38	U	ug/L	
78-11-5	Pentaerythritol Tetranitrate	EPA 8330A	10/27/2014 3:45	1	1	0.59	U	0.59	U	ug/L	
121-82-4	RDX	EPA 8330A	10/27/2014 3:45	1	1	0.17	U	0.17	U	ug/L	
479-45-8	Tetryl	EPA 8330A	10/27/2014 3:45	1	1	0.24	U	0.24	UJ	ug/L	*

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Explosives

Melrose AFB
Melrose AFB Semi-Annual
SDG: 214102205

COC Sample ID: **MA01MW001**
Location ID: **NA**
Lab Sample ID: **21410220503**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/21/2014 12:20**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
99-35-4	1,3,5-Trinitrobenzene	EPA 8330A	10/27/2014 4:23	1	1	0.15	UQ	0.15	UJ	ug/L	*
99-65-0	1,3-Dinitrobenzene	EPA 8330A	10/27/2014 4:23	1	1	0.15	U	0.15	U	ug/L	
118-96-7	2,4,6-Trinitrotoluene	EPA 8330A	10/27/2014 4:23	1	1	0.27	U	0.27	U	ug/L	
121-14-2	2,4-Dinitrotoluene	EPA 8330A	10/27/2014 4:23	1	1	0.29	U	0.29	U	ug/L	
606-20-2	2,6-Dinitrotoluene	EPA 8330A	10/27/2014 4:23	1	1	0.26	U	0.26	U	ug/L	
35572-78-2	2-Amino-4,6-dinitrotoluene	EPA 8330A	10/27/2014 4:23	1	1	0.3	U	0.3	U	ug/L	
88-72-2	2-Nitrotoluene	EPA 8330A	10/27/2014 4:23	1	1	0.17	U	0.17	U	ug/L	
99-08-1	3-Nitrotoluene	EPA 8330A	10/27/2014 4:23	1	1	0.33	U	0.33	U	ug/L	
19406-51-0	4-Amino-2,6-dinitrotoluene	EPA 8330A	10/27/2014 4:23	1	1	0.36	U	0.36	U	ug/L	
99-99-0	4-Nitrotoluene	EPA 8330A	10/27/2014 4:23	1	1	0.42	U	0.42	U	ug/L	
2691-41-0	HMX	EPA 8330A	10/27/2014 4:23	1	1	0.13	U	0.13	U	ug/L	
98-95-3	Nitrobenzene	EPA 8330A	10/27/2014 4:23	1	1	0.23	U	0.23	U	ug/L	
55-63-0	Nitroglycerin	EPA 8330A	10/27/2014 4:23	1	1	0.38	U	0.38	U	ug/L	
78-11-5	Pentaerythritol Tetranitrate	EPA 8330A	10/27/2014 4:23	1	1	0.59	U	0.59	U	ug/L	
121-82-4	RDX	EPA 8330A	10/27/2014 4:23	1	1	0.17	U	0.17	U	ug/L	
479-45-8	Tetryl	EPA 8330A	10/27/2014 4:23	1	1	0.24	U	0.24	UJ	ug/L	*

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Explosives

Melrose AFB
Melrose AFB Semi-Annual
SDG: 214102205

COC Sample ID: **MA01MW004**
Location ID: **NA**
Lab Sample ID: **21410220504**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/21/2014 11:00**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
99-35-4	1,3,5-Trinitrobenzene	EPA 8330A	10/27/2014 5:01	1	1	0.15	UQ	0.15	UJ	ug/L	*
99-65-0	1,3-Dinitrobenzene	EPA 8330A	10/27/2014 5:01	1	1	0.15	U	0.15	U	ug/L	
118-96-7	2,4,6-Trinitrotoluene	EPA 8330A	10/27/2014 5:01	1	1	0.27	U	0.27	U	ug/L	
121-14-2	2,4-Dinitrotoluene	EPA 8330A	10/27/2014 5:01	1	1	0.29	U	0.29	U	ug/L	
606-20-2	2,6-Dinitrotoluene	EPA 8330A	10/27/2014 5:01	1	1	0.26	U	0.26	U	ug/L	
35572-78-2	2-Amino-4,6-dinitrotoluene	EPA 8330A	10/27/2014 5:01	1	1	0.3	U	0.3	U	ug/L	
88-72-2	2-Nitrotoluene	EPA 8330A	10/27/2014 5:01	1	1	0.17	U	0.17	U	ug/L	
99-08-1	3-Nitrotoluene	EPA 8330A	10/27/2014 5:01	1	1	0.33	U	0.33	U	ug/L	
19406-51-0	4-Amino-2,6-dinitrotoluene	EPA 8330A	10/27/2014 5:01	1	1	0.36	U	0.36	U	ug/L	
99-99-0	4-Nitrotoluene	EPA 8330A	10/27/2014 5:01	1	1	0.42	U	0.42	U	ug/L	
2691-41-0	HMX	EPA 8330A	10/27/2014 5:01	1	1	0.13	U	0.13	U	ug/L	
98-95-3	Nitrobenzene	EPA 8330A	10/27/2014 5:01	1	1	0.23	U	0.23	U	ug/L	
55-63-0	Nitroglycerin	EPA 8330A	10/27/2014 5:01	1	1	0.38	U	0.38	U	ug/L	
78-11-5	Pentaerythritol Tetranitrate	EPA 8330A	10/27/2014 5:01	1	1	0.59	U	0.59	U	ug/L	
121-82-4	RDX	EPA 8330A	10/27/2014 5:01	1	1	0.17	U	0.17	U	ug/L	
479-45-8	Tetryl	EPA 8330A	10/27/2014 5:01	1	1	0.24	U	0.24	UJ	ug/L	*

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Explosives

Melrose AFB
Melrose AFB Semi-Annual
SDG: 214102205

COC Sample ID: **MA01MW004-a**
Location ID: **NA**
Lab Sample ID: **21410220505**
Sample Type: **Field Duplicate**

Sample Matrix : **Water**
Sample Date: **10/21/2014 11:00**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
99-35-4	1,3,5-Trinitrobenzene	EPA 8330A	10/27/2014 5:39	1	1	0.15	UQ	0.15	UJ	ug/L	*
99-65-0	1,3-Dinitrobenzene	EPA 8330A	10/27/2014 5:39	1	1	0.15	U	0.15	U	ug/L	
118-96-7	2,4,6-Trinitrotoluene	EPA 8330A	10/27/2014 5:39	1	1	0.27	U	0.27	U	ug/L	
121-14-2	2,4-Dinitrotoluene	EPA 8330A	10/27/2014 5:39	1	1	0.29	U	0.29	U	ug/L	
606-20-2	2,6-Dinitrotoluene	EPA 8330A	10/27/2014 5:39	1	1	0.26	U	0.26	U	ug/L	
35572-78-2	2-Amino-4,6-dinitrotoluene	EPA 8330A	10/27/2014 5:39	1	1	0.3	U	0.3	U	ug/L	
88-72-2	2-Nitrotoluene	EPA 8330A	10/27/2014 5:39	1	1	0.17	U	0.17	U	ug/L	
99-08-1	3-Nitrotoluene	EPA 8330A	10/27/2014 5:39	1	1	0.33	U	0.33	U	ug/L	
19406-51-0	4-Amino-2,6-dinitrotoluene	EPA 8330A	10/27/2014 5:39	1	1	0.36	U	0.36	U	ug/L	
99-99-0	4-Nitrotoluene	EPA 8330A	10/27/2014 5:39	1	1	0.42	U	0.42	U	ug/L	
2691-41-0	HMX	EPA 8330A	10/27/2014 5:39	1	1	0.13	U	0.13	U	ug/L	
98-95-3	Nitrobenzene	EPA 8330A	10/27/2014 5:39	1	1	0.23	U	0.23	U	ug/L	
55-63-0	Nitroglycerin	EPA 8330A	10/27/2014 5:39	1	1	0.38	U	0.38	U	ug/L	
78-11-5	Pentaerythritol Tetranitrate	EPA 8330A	10/27/2014 5:39	1	1	0.59	U	0.59	U	ug/L	
121-82-4	RDX	EPA 8330A	10/27/2014 5:39	1	1	0.17	U	0.17	U	ug/L	
479-45-8	Tetryl	EPA 8330A	10/27/2014 5:39	1	1	0.24	U	0.24	UJ	ug/L	*

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Explosives

Melrose AFB
Melrose AFB Semi-Annual
SDG: 214102205

COC Sample ID: **MA01MW003**
Location ID: **NA**
Lab Sample ID: **21410220507**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/21/2014 12:26**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
99-35-4	1,3,5-Trinitrobenzene	EPA 8330A	10/27/2014 6:16	1	1	0.15	UQ	0.15	UJ	ug/L	*
99-65-0	1,3-Dinitrobenzene	EPA 8330A	10/27/2014 6:16	1	1	0.15	U	0.15	U	ug/L	
118-96-7	2,4,6-Trinitrotoluene	EPA 8330A	10/27/2014 6:16	1	1	0.27	U	0.27	U	ug/L	
121-14-2	2,4-Dinitrotoluene	EPA 8330A	10/27/2014 6:16	1	1	0.29	U	0.29	U	ug/L	
606-20-2	2,6-Dinitrotoluene	EPA 8330A	10/27/2014 6:16	1	1	0.26	U	0.26	U	ug/L	
35572-78-2	2-Amino-4,6-dinitrotoluene	EPA 8330A	10/27/2014 6:16	1	1	0.3	U	0.3	U	ug/L	
88-72-2	2-Nitrotoluene	EPA 8330A	10/27/2014 6:16	1	1	0.17	U	0.17	U	ug/L	
99-08-1	3-Nitrotoluene	EPA 8330A	10/27/2014 6:16	1	1	0.33	U	0.33	U	ug/L	
19406-51-0	4-Amino-2,6-dinitrotoluene	EPA 8330A	10/27/2014 6:16	1	1	0.36	U	0.36	U	ug/L	
99-99-0	4-Nitrotoluene	EPA 8330A	10/27/2014 6:16	1	1	0.42	U	0.42	U	ug/L	
2691-41-0	HMX	EPA 8330A	10/27/2014 6:16	1	1	0.13	U	0.13	U	ug/L	
98-95-3	Nitrobenzene	EPA 8330A	10/27/2014 6:16	1	1	0.23	U	0.23	U	ug/L	
55-63-0	Nitroglycerin	EPA 8330A	10/27/2014 6:16	1	1	0.38	U	0.38	U	ug/L	
78-11-5	Pentaerythritol Tetranitrate	EPA 8330A	10/27/2014 6:16	1	1	0.59	U	0.59	U	ug/L	
121-82-4	RDX	EPA 8330A	10/27/2014 6:16	1	1	0.17	U	0.17	U	ug/L	
479-45-8	Tetryl	EPA 8330A	10/27/2014 6:16	1	1	0.24	U	0.24	UJ	ug/L	*

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Explosives

Melrose AFB
Melrose AFB Semi-Annual
SDG: 214102205

COC Sample ID: **M114MW002**
Location ID: **NA**
Lab Sample ID: **21410220509**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/22/2014 9:35**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
99-35-4	1,3,5-Trinitrobenzene	EPA 8330A	10/30/2014 17:26	1	1	0.15	UQ	0.15	UJ	ug/L	*
99-65-0	1,3-Dinitrobenzene	EPA 8330A	10/30/2014 17:26	1	1	0.15	U	0.15	U	ug/L	
118-96-7	2,4,6-Trinitrotoluene	EPA 8330A	10/30/2014 17:26	1	1	0.27	U	0.27	U	ug/L	
121-14-2	2,4-Dinitrotoluene	EPA 8330A	10/30/2014 17:26	1	1	0.29	U	0.29	U	ug/L	
606-20-2	2,6-Dinitrotoluene	EPA 8330A	10/30/2014 17:26	1	1	0.26	U	0.26	U	ug/L	
35572-78-2	2-Amino-4,6-dinitrotoluene	EPA 8330A	10/30/2014 17:26	1	1	0.3	U	0.3	U	ug/L	
88-72-2	2-Nitrotoluene	EPA 8330A	10/30/2014 17:26	1	1	0.17	U	0.17	U	ug/L	
99-08-1	3-Nitrotoluene	EPA 8330A	10/30/2014 17:26	1	1	0.33	U	0.33	U	ug/L	
19406-51-0	4-Amino-2,6-dinitrotoluene	EPA 8330A	10/30/2014 17:26	1	1	0.36	U	0.36	U	ug/L	
99-99-0	4-Nitrotoluene	EPA 8330A	10/30/2014 17:26	1	1	0.42	U	0.42	U	ug/L	
2691-41-0	HMX	EPA 8330A	10/30/2014 17:26	1	1	0.13	U	0.13	U	ug/L	
98-95-3	Nitrobenzene	EPA 8330A	10/30/2014 17:26	1	1	0.23	U	0.23	U	ug/L	
55-63-0	Nitroglycerin	EPA 8330A	10/30/2014 17:26	1	1	0.38	U	0.38	U	ug/L	
78-11-5	Pentaerythritol Tetranitrate	EPA 8330A	10/30/2014 17:26	1	1	0.59	U	0.59	U	ug/L	
121-82-4	RDX	EPA 8330A	10/30/2014 17:26	1	1	0.17	U	0.17	U	ug/L	
479-45-8	Tetryl	EPA 8330A	10/30/2014 17:26	1	1	0.24	U	0.24	UJ	ug/L	*

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Explosives

Melrose AFB
Melrose AFB Semi-Annual
SDG: 214102205

COC Sample ID: **M114MW003**
Location ID: **NA**
Lab Sample ID: **21410220511**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/22/2014 11:10**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
99-35-4	1,3,5-Trinitrobenzene	EPA 8330A	11/05/2014 14:44	20	20	3	UQ	3	UJ	ug/L	*
99-65-0	1,3-Dinitrobenzene	EPA 8330A	11/05/2014 14:44	20	20	3	U	3	U	ug/L	
118-96-7	2,4,6-Trinitrotoluene	EPA 8330A	11/05/2014 14:44	20	20	5.4	U	5.4	U	ug/L	
121-14-2	2,4-Dinitrotoluene	EPA 8330A	11/05/2014 14:44	20	20	5.8	U	5.8	U	ug/L	
606-20-2	2,6-Dinitrotoluene	EPA 8330A	11/05/2014 14:44	20	20	5.2	U	5.2	U	ug/L	
35572-78-2	2-Amino-4,6-dinitrotoluene	EPA 8330A	11/05/2014 14:44	20	20	6	U	6	U	ug/L	
88-72-2	2-Nitrotoluene	EPA 8330A	11/05/2014 14:44	20	20	3.4	U	3.4	U	ug/L	
99-08-1	3-Nitrotoluene	EPA 8330A	11/05/2014 14:44	20	20	6.6	U	6.6	U	ug/L	
19406-51-0	4-Amino-2,6-dinitrotoluene	EPA 8330A	11/05/2014 14:44	20	20	7.2	U	7.2	U	ug/L	
99-99-0	4-Nitrotoluene	EPA 8330A	11/05/2014 14:44	20	20	8.4	U	8.4	U	ug/L	
2691-41-0	HMX	EPA 8330A	11/05/2014 14:44	20	20	2.6	U	2.6	U	ug/L	
98-95-3	Nitrobenzene	EPA 8330A	11/05/2014 14:44	20	20	367		367		ug/L	
55-63-0	Nitroglycerin	EPA 8330A	11/05/2014 14:44	20	20	7.6	U	7.6	U	ug/L	
78-11-5	Pentaerythritol Tetranitrate	EPA 8330A	11/05/2014 14:44	20	20	11.8	U	11.8	U	ug/L	
121-82-4	RDX	EPA 8330A	11/05/2014 14:44	20	20	3.4	U	3.4	U	ug/L	
479-45-8	Tetryl	EPA 8330A	11/05/2014 14:44	20	20	4.8	U	4.8	UJ	ug/L	*

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Explosives

Melrose AFB
Melrose AFB Semi-Annual
SDG: 214102205

COC Sample ID: **M114MW004**
Location ID: **NA**
Lab Sample ID: **21410220512**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/22/2014 10:25**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
99-35-4	1,3,5-Trinitrobenzene	EPA 8330A	11/05/2014 13:29	1	1	0.15	UQ	0.15	UJ	ug/L	*
99-65-0	1,3-Dinitrobenzene	EPA 8330A	11/05/2014 13:29	1	1	0.15	U	0.15	U	ug/L	
118-96-7	2,4,6-Trinitrotoluene	EPA 8330A	11/05/2014 13:29	1	1	0.27	U	0.27	U	ug/L	
121-14-2	2,4-Dinitrotoluene	EPA 8330A	11/05/2014 13:29	1	1	0.29	U	0.29	U	ug/L	
606-20-2	2,6-Dinitrotoluene	EPA 8330A	11/05/2014 13:29	1	1	0.26	U	0.26	U	ug/L	
35572-78-2	2-Amino-4,6-dinitrotoluene	EPA 8330A	11/05/2014 13:29	1	1	0.3	U	0.3	U	ug/L	
88-72-2	2-Nitrotoluene	EPA 8330A	11/05/2014 13:29	1	1	0.17	U	0.17	U	ug/L	
99-08-1	3-Nitrotoluene	EPA 8330A	11/05/2014 13:29	1	1	0.33	U	0.33	U	ug/L	
19406-51-0	4-Amino-2,6-dinitrotoluene	EPA 8330A	11/05/2014 13:29	1	1	0.36	U	0.36	U	ug/L	
99-99-0	4-Nitrotoluene	EPA 8330A	11/05/2014 13:29	1	1	0.42	U	0.42	U	ug/L	
2691-41-0	HMX	EPA 8330A	11/05/2014 13:29	1	1	0.13	U	0.13	U	ug/L	
98-95-3	Nitrobenzene	EPA 8330A	11/05/2014 13:29	1	1	12.3		12.3		ug/L	
55-63-0	Nitroglycerin	EPA 8330A	11/05/2014 13:29	1	1	0.38	U	0.38	U	ug/L	
78-11-5	Pentaerythritol Tetranitrate	EPA 8330A	11/05/2014 13:29	1	1	0.59	U	0.59	U	ug/L	
121-82-4	RDX	EPA 8330A	11/05/2014 13:29	1	1	0.17	U	0.17	U	ug/L	
479-45-8	Tetryl	EPA 8330A	11/05/2014 13:29	1	1	0.24	U	0.24	UJ	ug/L	*

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Explosives

Melrose AFB
Melrose AFB Semi-Annual
SDG: 214102205

COC Sample ID: **M114MW001**
Location ID: **NA**
Lab Sample ID: **21410220514**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/22/2014 12:35**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
99-35-4	1,3,5-Trinitrobenzene	EPA 8330A	11/05/2014 14:06	1	1	0.15	UQ	0.15	UJ	ug/L	*
99-65-0	1,3-Dinitrobenzene	EPA 8330A	11/05/2014 14:06	1	1	0.15	U	0.15	U	ug/L	
118-96-7	2,4,6-Trinitrotoluene	EPA 8330A	11/05/2014 14:06	1	1	0.27	U	0.27	U	ug/L	
121-14-2	2,4-Dinitrotoluene	EPA 8330A	11/05/2014 14:06	1	1	0.29	U	0.29	U	ug/L	
606-20-2	2,6-Dinitrotoluene	EPA 8330A	11/05/2014 14:06	1	1	0.26	U	0.26	U	ug/L	
35572-78-2	2-Amino-4,6-dinitrotoluene	EPA 8330A	11/05/2014 14:06	1	1	0.3	U	0.3	U	ug/L	
88-72-2	2-Nitrotoluene	EPA 8330A	11/05/2014 14:06	1	1	0.17	U	0.17	U	ug/L	
99-08-1	3-Nitrotoluene	EPA 8330A	11/05/2014 14:06	1	1	0.33	U	0.33	U	ug/L	
19406-51-0	4-Amino-2,6-dinitrotoluene	EPA 8330A	11/05/2014 14:06	1	1	0.36	U	0.36	U	ug/L	
99-99-0	4-Nitrotoluene	EPA 8330A	11/05/2014 14:06	1	1	0.42	U	0.42	U	ug/L	
2691-41-0	HMX	EPA 8330A	11/05/2014 14:06	1	1	0.13	U	0.13	U	ug/L	
98-95-3	Nitrobenzene	EPA 8330A	11/05/2014 14:06	1	1	3.02		3.02		ug/L	
55-63-0	Nitroglycerin	EPA 8330A	11/05/2014 14:06	1	1	0.38	U	0.38	U	ug/L	
78-11-5	Pentaerythritol Tetranitrate	EPA 8330A	11/05/2014 14:06	1	1	0.59	U	0.59	U	ug/L	
121-82-4	RDX	EPA 8330A	11/05/2014 14:06	1	1	0.17	U	0.17	U	ug/L	
479-45-8	Tetryl	EPA 8330A	11/05/2014 14:06	1	1	0.24	U	0.24	UJ	ug/L	*

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Explosives

Melrose AFB
Melrose AFB Semi-Annual
SDG: 214102205

COC Sample ID: **MWQ-24**
Location ID: **NA**
Lab Sample ID: **21410220515**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/23/2014 9:32**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
99-35-4	1,3,5-Trinitrobenzene	EPA 8330A	10/30/2014 19:58	1	1	0.15	UQ	0.15	UJ	ug/L	*
99-65-0	1,3-Dinitrobenzene	EPA 8330A	10/30/2014 19:58	1	1	0.15	U	0.15	U	ug/L	
118-96-7	2,4,6-Trinitrotoluene	EPA 8330A	10/30/2014 19:58	1	1	0.27	U	0.27	U	ug/L	
121-14-2	2,4-Dinitrotoluene	EPA 8330A	10/30/2014 19:58	1	1	0.29	U	0.29	U	ug/L	
606-20-2	2,6-Dinitrotoluene	EPA 8330A	10/30/2014 19:58	1	1	0.26	U	0.26	U	ug/L	
35572-78-2	2-Amino-4,6-dinitrotoluene	EPA 8330A	10/30/2014 19:58	1	1	0.3	U	0.3	U	ug/L	
88-72-2	2-Nitrotoluene	EPA 8330A	10/30/2014 19:58	1	1	0.17	U	0.17	U	ug/L	
99-08-1	3-Nitrotoluene	EPA 8330A	10/30/2014 19:58	1	1	0.33	U	0.33	U	ug/L	
19406-51-0	4-Amino-2,6-dinitrotoluene	EPA 8330A	10/30/2014 19:58	1	1	0.36	U	0.36	U	ug/L	
99-99-0	4-Nitrotoluene	EPA 8330A	10/30/2014 19:58	1	1	0.42	U	0.42	U	ug/L	
2691-41-0	HMX	EPA 8330A	10/30/2014 19:58	1	1	0.13	U	0.13	U	ug/L	
55-63-0	Nitroglycerin	EPA 8330A	10/30/2014 19:58	1	1	0.38	U	0.38	U	ug/L	
78-11-5	Pentaerythritol Tetranitrate	EPA 8330A	10/30/2014 19:58	1	1	0.59	U	0.59	U	ug/L	
121-82-4	RDX	EPA 8330A	10/30/2014 19:58	1	1	0.17	U	0.17	U	ug/L	
479-45-8	Tetryl	EPA 8330A	10/30/2014 19:58	1	1	0.24	U	0.24	UJ	ug/L	*
98-95-3	Nitrobenzene	EPA 8330A	11/05/2014 16:37	20	20	375		375		ug/L	

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Explosives

Melrose AFB
Melrose AFB Semi-Annual
SDG: 214102205

COC Sample ID: **MA02MW001D**
Location ID: **NA**
Lab Sample ID: **21410220520**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/23/2014 11:43**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
99-35-4	1,3,5-Trinitrobenzene	EPA 8330A	10/30/2014 21:51	1	1	0.15	UQ	0.15	UJ	ug/L	*
99-65-0	1,3-Dinitrobenzene	EPA 8330A	10/30/2014 21:51	1	1	0.15	U	0.15	U	ug/L	
118-96-7	2,4,6-Trinitrotoluene	EPA 8330A	10/30/2014 21:51	1	1	0.27	U	0.27	U	ug/L	
121-14-2	2,4-Dinitrotoluene	EPA 8330A	10/30/2014 21:51	1	1	0.29	U	0.29	U	ug/L	
606-20-2	2,6-Dinitrotoluene	EPA 8330A	10/30/2014 21:51	1	1	0.26	U	0.26	U	ug/L	
35572-78-2	2-Amino-4,6-dinitrotoluene	EPA 8330A	10/30/2014 21:51	1	1	0.3	U	0.3	U	ug/L	
88-72-2	2-Nitrotoluene	EPA 8330A	10/30/2014 21:51	1	1	0.17	U	0.17	U	ug/L	
99-08-1	3-Nitrotoluene	EPA 8330A	10/30/2014 21:51	1	1	0.33	U	0.33	U	ug/L	
19406-51-0	4-Amino-2,6-dinitrotoluene	EPA 8330A	10/30/2014 21:51	1	1	0.36	U	0.36	U	ug/L	
99-99-0	4-Nitrotoluene	EPA 8330A	10/30/2014 21:51	1	1	0.42	U	0.42	U	ug/L	
2691-41-0	HMX	EPA 8330A	10/30/2014 21:51	1	1	0.13	U	0.13	U	ug/L	
98-95-3	Nitrobenzene	EPA 8330A	10/30/2014 21:51	1	1	0.23	U	0.23	U	ug/L	
55-63-0	Nitroglycerin	EPA 8330A	10/30/2014 21:51	1	1	0.38	U	0.38	U	ug/L	
78-11-5	Pentaerythritol Tetranitrate	EPA 8330A	10/30/2014 21:51	1	1	0.59	U	0.59	U	ug/L	
121-82-4	RDX	EPA 8330A	10/30/2014 21:51	1	1	0.17	U	0.17	U	ug/L	
479-45-8	Tetryl	EPA 8330A	10/30/2014 21:51	1	1	0.24	U	0.24	UJ	ug/L	*

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB
Melrose AFB Semi-Annual
SDG: 214102205

COC Sample ID: **MA01MW002**
Location ID: **NA**
Lab Sample ID: **21410220501**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/21/2014 10:40**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7439-97-6	Mercury	EPA 7470A	10/23/2014 15:08	1	0.2	0.07	U	0.07	U	ug/L	
7439-97-6	Mercury, Dissolved	EPA 7470A Dissolved	10/27/2014 15:03	1	0.2	0.07	U	0.07	UJ	ug/L	*
7440-23-5	Sodium, Dissolved	EPA 6020A Dissolved	10/31/2014 0:13	100	10000	490000		490000		ug/L	
7429-90-5	Aluminum, Dissolved	EPA 6020A Dissolved	10/31/2014 0:50	5	100	25	U	25	U	ug/L	
7440-36-0	Antimony, Dissolved	EPA 6020A Dissolved	10/31/2014 0:50	5	10	2.5	U	2.5	U	ug/L	
7440-38-2	Arsenic, Dissolved	EPA 6020A Dissolved	10/31/2014 0:50	5	5	1.25	U	1.25	U	ug/L	
7440-39-3	Barium, Dissolved	EPA 6020A Dissolved	10/31/2014 0:50	5	5	14.1		14.1		ug/L	
7440-41-7	Beryllium, Dissolved	EPA 6020A Dissolved	10/31/2014 0:50	5	5	1.25	U	1.25	U	ug/L	
7440-43-9	Cadmium, Dissolved	EPA 6020A Dissolved	10/31/2014 0:50	5	5	1.25	U	1.25	U	ug/L	
7440-70-2	Calcium, Dissolved	EPA 6020A Dissolved	10/31/2014 0:50	5	2500	44400		44400		ug/L	
7440-47-3	Chromium, Dissolved	EPA 6020A Dissolved	10/31/2014 0:50	5	5	1.45	J	1.45	J	ug/L	
7440-48-4	Cobalt, Dissolved	EPA 6020A Dissolved	10/31/2014 0:50	5	5	1.25	U	1.25	U	ug/L	
7440-50-8	Copper, Dissolved	EPA 6020A Dissolved	10/31/2014 0:50	5	5	1.25	U	1.25	U	ug/L	
7439-89-6	Iron, Dissolved	EPA 6020A Dissolved	10/31/2014 0:50	5	500	125	U	125	U	ug/L	
7439-92-1	Lead, Dissolved	EPA 6020A Dissolved	10/31/2014 0:50	5	5	1.25	U	1.25	U	ug/L	
7439-95-4	Magnesium, Dissolved	EPA 6020A Dissolved	10/31/2014 0:50	5	500	36800		36800		ug/L	
7439-96-5	Manganese, Dissolved	EPA 6020A Dissolved	10/31/2014 0:50	5	25	6.25	U	6.25	U	ug/L	
7439-98-7	Molybdenum, Dissolved	EPA 6020A Dissolved	10/31/2014 0:50	5	5	6.67		6.67		ug/L	
7440-02-0	Nickel, Dissolved	EPA 6020A Dissolved	10/31/2014 0:50	5	10	2.5	U	2.5	U	ug/L	
7440-09-7	Potassium, Dissolved	EPA 6020A Dissolved	10/31/2014 0:50	5	500	6020		6020		ug/L	

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB
Melrose AFB Semi-Annual
SDG: 214102205

COC Sample ID: **MA01MW002**
Location ID: **NA**
Lab Sample ID: **21410220501**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/21/2014 10:40**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7782-49-2	Selenium, Dissolved	EPA 6020A Dissolved	10/31/2014 0:50	5	5	4.61	J	4.61	J	ug/L	
7440-22-4	Silver, Dissolved	EPA 6020A Dissolved	10/31/2014 0:50	5	5	1.25	U	1.25	U	ug/L	
7440-28-0	Thallium, Dissolved	EPA 6020A Dissolved	10/31/2014 0:50	5	5	1.25	U	1.25	UJ	ug/L	*
7440-32-6	Titanium, Dissolved	EPA 6020A Dissolved	10/31/2014 0:50	5	5	1.25	U	1.25	U	ug/L	
7440-62-2	Vanadium, Dissolved	EPA 6020A Dissolved	10/31/2014 0:50	5	5	11.5		11.5		ug/L	
7440-66-6	Zinc, Dissolved	EPA 6020A Dissolved	10/31/2014 0:50	5	100	25	U	25	U	ug/L	
7440-23-5	Sodium	EPA 6020A	10/31/2014 23:49	100	10000	503000		503000		ug/L	
7429-90-5	Aluminum	EPA 6020A	10/31/2014 23:56	5	100	26.1	J	26.1	J	ug/L	
7440-36-0	Antimony	EPA 6020A	10/31/2014 23:56	5	10	2.5	U	2.5	U	ug/L	
7440-38-2	Arsenic	EPA 6020A	10/31/2014 23:56	5	5	1.25	U	1.25	U	ug/L	
7440-39-3	Barium	EPA 6020A	10/31/2014 23:56	5	5	14		14		ug/L	
7440-41-7	Beryllium	EPA 6020A	10/31/2014 23:56	5	5	1.25	U	1.25	U	ug/L	
7440-43-9	Cadmium	EPA 6020A	10/31/2014 23:56	5	5	1.25	U	1.25	U	ug/L	
7440-70-2	Calcium	EPA 6020A	10/31/2014 23:56	5	2500	44400		44400		ug/L	
7440-47-3	Chromium	EPA 6020A	10/31/2014 23:56	5	5	1.7	J	1.7	J	ug/L	
7440-48-4	Cobalt	EPA 6020A	10/31/2014 23:56	5	5	1.25	U	1.25	U	ug/L	
7440-50-8	Copper	EPA 6020A	10/31/2014 23:56	5	5	1.25	U	1.25	U	ug/L	
7439-89-6	Iron	EPA 6020A	10/31/2014 23:56	5	500	125	U	125	U	ug/L	
7439-92-1	Lead	EPA 6020A	10/31/2014 23:56	5	5	1.25	U	1.25	U	ug/L	
7439-95-4	Magnesium	EPA 6020A	10/31/2014 23:56	5	500	37400		37400		ug/L	
7439-96-5	Manganese	EPA 6020A	10/31/2014 23:56	5	25	6.25	U	6.25	U	ug/L	
7439-98-7	Molybdenum	EPA 6020A	10/31/2014 23:56	5	5	6.4		6.4		ug/L	
7440-02-0	Nickel	EPA 6020A	10/31/2014 23:56	5	10	2.5	U	2.5	U	ug/L	
7440-09-7	Potassium	EPA 6020A	10/31/2014 23:56	5	500	5960		5960		ug/L	
7782-49-2	Selenium	EPA 6020A	10/31/2014 23:56	5	5	4.79	J	4.79	J	ug/L	
7440-22-4	Silver	EPA 6020A	10/31/2014 23:56	5	5	1.25	U	1.25	U	ug/L	

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB
Melrose AFB Semi-Annual
SDG: 214102205

COC Sample ID: **MA01MW002**
Location ID: **NA**
Lab Sample ID: **21410220501**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/21/2014 10:40**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7440-28-0	Thallium	EPA 6020A	10/31/2014 23:56	5	5	1.25	U	1.25	U	ug/L
7440-32-6	Titanium	EPA 6020A	10/31/2014 23:56	5	5	1.25	U	1.25	U	ug/L
7440-62-2	Vanadium	EPA 6020A	10/31/2014 23:56	5	5	11.5		11.5		ug/L
7440-66-6	Zinc	EPA 6020A	11/03/2014 20:47	5	100	25	U	25	U	ug/L

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB
Melrose AFB Semi-Annual
SDG: 214102205

COC Sample ID: **MA01MW001**
Location ID: **NA**
Lab Sample ID: **21410220503**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/21/2014 12:20**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7439-97-6	Mercury	EPA 7470A	10/23/2014 15:10	1	0.2	0.07	U	0.07	U	ug/L	
7439-97-6	Mercury, Dissolved	EPA 7470A Dissolved	10/27/2014 15:05	1	0.2	0.07	U	0.07	UJ	ug/L	*
7440-23-5	Sodium, Dissolved	EPA 6020A Dissolved	10/31/2014 1:56	100	10000	534000		534000		ug/L	
7429-90-5	Aluminum, Dissolved	EPA 6020A Dissolved	10/31/2014 2:26	5	100	25	U	25	U	ug/L	
7440-36-0	Antimony, Dissolved	EPA 6020A Dissolved	10/31/2014 2:26	5	10	2.5	U	2.5	U	ug/L	
7440-38-2	Arsenic, Dissolved	EPA 6020A Dissolved	10/31/2014 2:26	5	5	1.25	U	1.25	U	ug/L	
7440-39-3	Barium, Dissolved	EPA 6020A Dissolved	10/31/2014 2:26	5	5	11.1		11.1		ug/L	
7440-41-7	Beryllium, Dissolved	EPA 6020A Dissolved	10/31/2014 2:26	5	5	1.25	U	1.25	U	ug/L	
7440-43-9	Cadmium, Dissolved	EPA 6020A Dissolved	10/31/2014 2:26	5	5	1.25	U	1.25	U	ug/L	
7440-70-2	Calcium, Dissolved	EPA 6020A Dissolved	10/31/2014 2:26	5	2500	47600		47600		ug/L	
7440-47-3	Chromium, Dissolved	EPA 6020A Dissolved	10/31/2014 2:26	5	5	1.25	U	1.25	U	ug/L	
7440-48-4	Cobalt, Dissolved	EPA 6020A Dissolved	10/31/2014 2:26	5	5	1.25	U	1.25	U	ug/L	
7440-50-8	Copper, Dissolved	EPA 6020A Dissolved	10/31/2014 2:26	5	5	1.25	U	1.25	U	ug/L	
7439-89-6	Iron, Dissolved	EPA 6020A Dissolved	10/31/2014 2:26	5	500	125	U	125	U	ug/L	
7439-92-1	Lead, Dissolved	EPA 6020A Dissolved	10/31/2014 2:26	5	5	1.25	U	1.25	U	ug/L	
7439-95-4	Magnesium, Dissolved	EPA 6020A Dissolved	10/31/2014 2:26	5	500	40700		40700		ug/L	
7439-96-5	Manganese, Dissolved	EPA 6020A Dissolved	10/31/2014 2:26	5	25	6.25	U	6.25	U	ug/L	
7439-98-7	Molybdenum, Dissolved	EPA 6020A Dissolved	10/31/2014 2:26	5	5	5.44		5.44		ug/L	
7440-02-0	Nickel, Dissolved	EPA 6020A Dissolved	10/31/2014 2:26	5	10	2.5	U	2.5	U	ug/L	
7440-09-7	Potassium, Dissolved	EPA 6020A Dissolved	10/31/2014 2:26	5	500	5740		5740		ug/L	

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB
Melrose AFB Semi-Annual
SDG: 214102205

COC Sample ID: **MA01MW001**
Location ID: **NA**
Lab Sample ID: **21410220503**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/21/2014 12:20**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7782-49-2	Selenium, Dissolved	EPA 6020A Dissolved	10/31/2014 2:26	5	5	4.24	J	4.24	J	ug/L	
7440-22-4	Silver, Dissolved	EPA 6020A Dissolved	10/31/2014 2:26	5	5	1.25	U	1.25	U	ug/L	
7440-28-0	Thallium, Dissolved	EPA 6020A Dissolved	10/31/2014 2:26	5	5	1.25	U	1.25	UJ	ug/L	*
7440-32-6	Titanium, Dissolved	EPA 6020A Dissolved	10/31/2014 2:26	5	5	1.25	U	1.25	U	ug/L	
7440-62-2	Vanadium, Dissolved	EPA 6020A Dissolved	10/31/2014 2:26	5	5	11		11		ug/L	
7440-66-6	Zinc, Dissolved	EPA 6020A Dissolved	10/31/2014 2:26	5	100	25	U	25	U	ug/L	
7440-23-5	Sodium	EPA 6020A	11/01/2014 0:11	100	10000	605000		605000		ug/L	
7429-90-5	Aluminum	EPA 6020A	11/01/2014 0:18	5	100	25	U	25	U	ug/L	
7440-36-0	Antimony	EPA 6020A	11/01/2014 0:18	5	10	2.5	U	2.5	U	ug/L	
7440-38-2	Arsenic	EPA 6020A	11/01/2014 0:18	5	5	1.25	U	1.25	U	ug/L	
7440-39-3	Barium	EPA 6020A	11/01/2014 0:18	5	5	12.6		12.6		ug/L	
7440-41-7	Beryllium	EPA 6020A	11/01/2014 0:18	5	5	1.25	U	1.25	U	ug/L	
7440-43-9	Cadmium	EPA 6020A	11/01/2014 0:18	5	5	1.25	U	1.25	U	ug/L	
7440-70-2	Calcium	EPA 6020A	11/01/2014 0:18	5	2500	52700		52700		ug/L	
7440-47-3	Chromium	EPA 6020A	11/01/2014 0:18	5	5	1.25	U	1.25	U	ug/L	
7440-48-4	Cobalt	EPA 6020A	11/01/2014 0:18	5	5	1.25	U	1.25	U	ug/L	
7440-50-8	Copper	EPA 6020A	11/01/2014 0:18	5	5	1.25	U	1.25	U	ug/L	
7439-89-6	Iron	EPA 6020A	11/01/2014 0:18	5	500	125	U	125	U	ug/L	
7439-92-1	Lead	EPA 6020A	11/01/2014 0:18	5	5	1.25	U	1.25	U	ug/L	
7439-95-4	Magnesium	EPA 6020A	11/01/2014 0:18	5	500	45800		45800		ug/L	
7439-96-5	Manganese	EPA 6020A	11/01/2014 0:18	5	25	6.25	U	6.25	U	ug/L	
7439-98-7	Molybdenum	EPA 6020A	11/01/2014 0:18	5	5	5.63		5.63		ug/L	
7440-02-0	Nickel	EPA 6020A	11/01/2014 0:18	5	10	2.5	U	2.5	U	ug/L	
7440-09-7	Potassium	EPA 6020A	11/01/2014 0:18	5	500	6330		6330		ug/L	
7782-49-2	Selenium	EPA 6020A	11/01/2014 0:18	5	5	4.59	J	4.59	J	ug/L	
7440-22-4	Silver	EPA 6020A	11/01/2014 0:18	5	5	1.25	U	1.25	U	ug/L	

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB
Melrose AFB Semi-Annual
SDG: 214102205

COC Sample ID: **MA01MW001**
Location ID: **NA**
Lab Sample ID: **21410220503**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/21/2014 12:20**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7440-28-0	Thallium	EPA 6020A	11/01/2014 0:18	5	5	1.25	U	1.25	U	ug/L
7440-32-6	Titanium	EPA 6020A	11/01/2014 0:18	5	5	1.25	U	1.25	U	ug/L
7440-62-2	Vanadium	EPA 6020A	11/01/2014 0:18	5	5	12		12		ug/L
7440-66-6	Zinc	EPA 6020A	11/03/2014 20:50	5	100	25	U	25	U	ug/L

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB
Melrose AFB Semi-Annual
SDG: 214102205

COC Sample ID: **MA01MW004**
Location ID: **NA**
Lab Sample ID: **21410220504**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/21/2014 11:00**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7439-97-6	Mercury	EPA 7470A	10/23/2014 15:12	1	0.2	0.07	U	0.07	U	ug/L	
7439-97-6	Mercury, Dissolved	EPA 7470A Dissolved	10/27/2014 15:07	1	0.2	0.07	U	0.07	UJ	ug/L	*
7439-95-4	Magnesium, Dissolved	EPA 6020A Dissolved	10/31/2014 2:34	100	10000	34800		34800		ug/L	
7440-23-5	Sodium, Dissolved	EPA 6020A Dissolved	10/31/2014 2:34	100	10000	306000		306000		ug/L	
7429-90-5	Aluminum, Dissolved	EPA 6020A Dissolved	10/31/2014 2:41	2	40	10	U	10	U	ug/L	
7440-36-0	Antimony, Dissolved	EPA 6020A Dissolved	10/31/2014 2:41	2	4	1	U	1	U	ug/L	
7440-38-2	Arsenic, Dissolved	EPA 6020A Dissolved	10/31/2014 2:41	2	2	1.4	J	1.4	J	ug/L	
7440-39-3	Barium, Dissolved	EPA 6020A Dissolved	10/31/2014 2:41	2	2	20.3		20.3		ug/L	
7440-41-7	Beryllium, Dissolved	EPA 6020A Dissolved	10/31/2014 2:41	2	2	0.5	U	0.5	U	ug/L	
7440-43-9	Cadmium, Dissolved	EPA 6020A Dissolved	10/31/2014 2:41	2	2	0.5	U	0.5	U	ug/L	
7440-70-2	Calcium, Dissolved	EPA 6020A Dissolved	10/31/2014 2:41	2	1000	41400		41400		ug/L	
7440-47-3	Chromium, Dissolved	EPA 6020A Dissolved	10/31/2014 2:41	2	2	0.66	J	0.66	J	ug/L	
7440-48-4	Cobalt, Dissolved	EPA 6020A Dissolved	10/31/2014 2:41	2	2	0.5	U	0.5	U	ug/L	
7440-50-8	Copper, Dissolved	EPA 6020A Dissolved	10/31/2014 2:41	2	2	1.78	J	1.78	J	ug/L	
7439-89-6	Iron, Dissolved	EPA 6020A Dissolved	10/31/2014 2:41	2	200	50	U	50	U	ug/L	
7439-92-1	Lead, Dissolved	EPA 6020A Dissolved	10/31/2014 2:41	2	2	0.5	U	0.5	U	ug/L	
7439-96-5	Manganese, Dissolved	EPA 6020A Dissolved	10/31/2014 2:41	2	10	2.5	U	2.5	U	ug/L	
7439-98-7	Molybdenum, Dissolved	EPA 6020A Dissolved	10/31/2014 2:41	2	2	5.52		5.52		ug/L	
7440-02-0	Nickel, Dissolved	EPA 6020A Dissolved	10/31/2014 2:41	2	4	1	U	1	U	ug/L	
7440-09-7	Potassium, Dissolved	EPA 6020A Dissolved	10/31/2014 2:41	2	200	5740		5740		ug/L	

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB
Melrose AFB Semi-Annual
SDG: 214102205

COC Sample ID: **MA01MW004**
Location ID: **NA**
Lab Sample ID: **21410220504**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/21/2014 11:00**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7782-49-2	Selenium, Dissolved	EPA 6020A Dissolved	10/31/2014 2:41	2	2	6.81		6.81		ug/L	
7440-22-4	Silver, Dissolved	EPA 6020A Dissolved	10/31/2014 2:41	2	2	0.5	U	0.5	U	ug/L	
7440-28-0	Thallium, Dissolved	EPA 6020A Dissolved	10/31/2014 2:41	2	2	0.5	U	0.5	UJ	ug/L	*
7440-32-6	Titanium, Dissolved	EPA 6020A Dissolved	10/31/2014 2:41	2	2	0.5	U	0.5	U	ug/L	
7440-62-2	Vanadium, Dissolved	EPA 6020A Dissolved	10/31/2014 2:41	2	2	17.7		17.7		ug/L	
7440-66-6	Zinc, Dissolved	EPA 6020A Dissolved	10/31/2014 2:41	2	40	10.9	J	10.9	J	ug/L	
7439-95-4	Magnesium	EPA 6020A	11/01/2014 1:10	100	10000	35300		35300		ug/L	
7440-23-5	Sodium	EPA 6020A	11/01/2014 1:10	100	10000	305000		305000		ug/L	
7429-90-5	Aluminum	EPA 6020A	11/01/2014 1:18	2	40	10	U	10	U	ug/L	
7440-36-0	Antimony	EPA 6020A	11/01/2014 1:18	2	4	1	U	1	U	ug/L	
7440-38-2	Arsenic	EPA 6020A	11/01/2014 1:18	2	2	1.39	J	1.39	J	ug/L	
7440-39-3	Barium	EPA 6020A	11/01/2014 1:18	2	2	19.9		19.9		ug/L	
7440-41-7	Beryllium	EPA 6020A	11/01/2014 1:18	2	2	0.5	U	0.5	U	ug/L	
7440-43-9	Cadmium	EPA 6020A	11/01/2014 1:18	2	2	0.5	U	0.5	U	ug/L	
7440-70-2	Calcium	EPA 6020A	11/01/2014 1:18	2	1000	40800		40800		ug/L	
7440-47-3	Chromium	EPA 6020A	11/01/2014 1:18	2	2	0.79	J	0.79	J	ug/L	
7440-48-4	Cobalt	EPA 6020A	11/01/2014 1:18	2	2	0.5	U	0.5	U	ug/L	
7440-50-8	Copper	EPA 6020A	11/01/2014 1:18	2	2	1.45	J	1.45	J	ug/L	
7439-89-6	Iron	EPA 6020A	11/01/2014 1:18	2	200	50	U	50	U	ug/L	
7439-92-1	Lead	EPA 6020A	11/01/2014 1:18	2	2	0.5	U	0.5	U	ug/L	
7439-96-5	Manganese	EPA 6020A	11/01/2014 1:18	2	10	2.5	U	2.5	U	ug/L	
7439-98-7	Molybdenum	EPA 6020A	11/01/2014 1:18	2	2	5.59		5.59		ug/L	
7440-02-0	Nickel	EPA 6020A	11/01/2014 1:18	2	4	1	U	1	U	ug/L	
7440-09-7	Potassium	EPA 6020A	11/01/2014 1:18	2	200	5530		5530		ug/L	
7782-49-2	Selenium	EPA 6020A	11/01/2014 1:18	2	2	6.35		6.35		ug/L	
7440-22-4	Silver	EPA 6020A	11/01/2014 1:18	2	2	0.5	U	0.5	U	ug/L	

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB
Melrose AFB Semi-Annual
SDG: 214102205

COC Sample ID: **MA01MW004**
Location ID: **NA**
Lab Sample ID: **21410220504**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/21/2014 11:00**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7440-28-0	Thallium	EPA 6020A	11/01/2014 1:18	2	2	0.5	U	0.5	U	ug/L
7440-32-6	Titanium	EPA 6020A	11/01/2014 1:18	2	2	0.5	U	0.5	U	ug/L
7440-62-2	Vanadium	EPA 6020A	11/01/2014 1:18	2	2	18		18		ug/L
7440-66-6	Zinc	EPA 6020A	11/03/2014 20:52	2	40	11.7	J	11.7	J	ug/L

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB
Melrose AFB Semi-Annual
SDG: 214102205

COC Sample ID: **MA01MW004-a**
Location ID: **NA**
Lab Sample ID: **21410220505**
Sample Type: **Field Duplicate**

Sample Matrix : **Water**
Sample Date: **10/21/2014 11:00**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7439-97-6	Mercury	EPA 7470A	10/23/2014 15:13	1	0.2	0.08366	J	0.08366	J	ug/L	
7439-97-6	Mercury, Dissolved	EPA 7470A Dissolved	10/27/2014 14:37	1	0.2	0.07	U	0.07	UJ	ug/L	*
7439-95-4	Magnesium, Dissolved	EPA 6020A Dissolved	10/31/2014 2:48	100	10000	34900		34900		ug/L	
7440-23-5	Sodium, Dissolved	EPA 6020A Dissolved	10/31/2014 2:48	100	10000	309000		309000		ug/L	
7429-90-5	Aluminum, Dissolved	EPA 6020A Dissolved	10/31/2014 2:56	2	40	10	U	10	U	ug/L	
7440-36-0	Antimony, Dissolved	EPA 6020A Dissolved	10/31/2014 2:56	2	4	1	U	1	U	ug/L	
7440-38-2	Arsenic, Dissolved	EPA 6020A Dissolved	10/31/2014 2:56	2	2	1.31	J	1.31	J	ug/L	
7440-39-3	Barium, Dissolved	EPA 6020A Dissolved	10/31/2014 2:56	2	2	19.1		19.1		ug/L	
7440-41-7	Beryllium, Dissolved	EPA 6020A Dissolved	10/31/2014 2:56	2	2	0.5	U	0.5	U	ug/L	
7440-43-9	Cadmium, Dissolved	EPA 6020A Dissolved	10/31/2014 2:56	2	2	0.5	U	0.5	U	ug/L	
7440-70-2	Calcium, Dissolved	EPA 6020A Dissolved	10/31/2014 2:56	2	1000	40100		40100		ug/L	
7440-47-3	Chromium, Dissolved	EPA 6020A Dissolved	10/31/2014 2:56	2	2	0.63	J	0.63	J	ug/L	
7440-48-4	Cobalt, Dissolved	EPA 6020A Dissolved	10/31/2014 2:56	2	2	0.5	U	0.5	U	ug/L	
7440-50-8	Copper, Dissolved	EPA 6020A Dissolved	10/31/2014 2:56	2	2	1.4	J	1.4	J	ug/L	
7439-89-6	Iron, Dissolved	EPA 6020A Dissolved	10/31/2014 2:56	2	200	50	U	50	U	ug/L	
7439-92-1	Lead, Dissolved	EPA 6020A Dissolved	10/31/2014 2:56	2	2	0.5	U	0.5	U	ug/L	
7439-96-5	Manganese, Dissolved	EPA 6020A Dissolved	10/31/2014 2:56	2	10	2.5	U	2.5	U	ug/L	
7439-98-7	Molybdenum, Dissolved	EPA 6020A Dissolved	10/31/2014 2:56	2	2	5.33		5.33		ug/L	
7440-02-0	Nickel, Dissolved	EPA 6020A Dissolved	10/31/2014 2:56	2	4	1	U	1	U	ug/L	
7440-09-7	Potassium, Dissolved	EPA 6020A Dissolved	10/31/2014 2:56	2	200	5480		5480		ug/L	

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB
Melrose AFB Semi-Annual
SDG: 214102205

COC Sample ID: **MA01MW004-a**
Location ID: **NA**
Lab Sample ID: **21410220505**
Sample Type: **Field Duplicate**

Sample Matrix : **Water**
Sample Date: **10/21/2014 11:00**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7782-49-2	Selenium, Dissolved	EPA 6020A Dissolved	10/31/2014 2:56	2	2	6.45		6.45		ug/L	
7440-22-4	Silver, Dissolved	EPA 6020A Dissolved	10/31/2014 2:56	2	2	0.5	U	0.5	U	ug/L	
7440-28-0	Thallium, Dissolved	EPA 6020A Dissolved	10/31/2014 2:56	2	2	0.5	U	0.5	UJ	ug/L	*
7440-32-6	Titanium, Dissolved	EPA 6020A Dissolved	10/31/2014 2:56	2	2	0.5	U	0.5	U	ug/L	
7440-62-2	Vanadium, Dissolved	EPA 6020A Dissolved	10/31/2014 2:56	2	2	17.1		17.1		ug/L	
7440-66-6	Zinc, Dissolved	EPA 6020A Dissolved	10/31/2014 2:56	2	40	10	U	10	U	ug/L	
7439-95-4	Magnesium	EPA 6020A	11/01/2014 1:33	100	10000	38500		38500		ug/L	
7440-23-5	Sodium	EPA 6020A	11/01/2014 1:33	100	10000	336000		336000		ug/L	
7429-90-5	Aluminum	EPA 6020A	11/01/2014 1:40	2	40	10.3	J	10.3	J	ug/L	
7440-36-0	Antimony	EPA 6020A	11/01/2014 1:40	2	4	1	U	1	U	ug/L	
7440-38-2	Arsenic	EPA 6020A	11/01/2014 1:40	2	2	1.46	J	1.46	J	ug/L	
7440-39-3	Barium	EPA 6020A	11/01/2014 1:40	2	2	20.7		20.7		ug/L	
7440-41-7	Beryllium	EPA 6020A	11/01/2014 1:40	2	2	0.5	U	0.5	U	ug/L	
7440-43-9	Cadmium	EPA 6020A	11/01/2014 1:40	2	2	0.5	U	0.5	U	ug/L	
7440-70-2	Calcium	EPA 6020A	11/01/2014 1:40	2	1000	43000		43000		ug/L	
7440-47-3	Chromium	EPA 6020A	11/01/2014 1:40	2	2	0.78	J	0.78	J	ug/L	
7440-48-4	Cobalt	EPA 6020A	11/01/2014 1:40	2	2	0.5	U	0.5	U	ug/L	
7440-50-8	Copper	EPA 6020A	11/01/2014 1:40	2	2	1.34	J	1.34	J	ug/L	
7439-89-6	Iron	EPA 6020A	11/01/2014 1:40	2	200	50	U	50	U	ug/L	
7439-92-1	Lead	EPA 6020A	11/01/2014 1:40	2	2	0.5	U	0.5	U	ug/L	
7439-96-5	Manganese	EPA 6020A	11/01/2014 1:40	2	10	2.5	U	2.5	U	ug/L	
7439-98-7	Molybdenum	EPA 6020A	11/01/2014 1:40	2	2	5.87		5.87		ug/L	
7440-02-0	Nickel	EPA 6020A	11/01/2014 1:40	2	4	1	U	1	U	ug/L	
7440-09-7	Potassium	EPA 6020A	11/01/2014 1:40	2	200	5790		5790		ug/L	
7782-49-2	Selenium	EPA 6020A	11/01/2014 1:40	2	2	6.8		6.8		ug/L	
7440-22-4	Silver	EPA 6020A	11/01/2014 1:40	2	2	0.5	U	0.5	U	ug/L	

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB
Melrose AFB Semi-Annual
SDG: 214102205

COC Sample ID: **MA01MW004-a**
Location ID: **NA**
Lab Sample ID: **21410220505**
Sample Type: **Field Duplicate**

Sample Matrix : **Water**
Sample Date: **10/21/2014 11:00**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7440-28-0	Thallium	EPA 6020A	11/01/2014 1:40	2	2	0.5	U	0.5	U	ug/L
7440-32-6	Titanium	EPA 6020A	11/01/2014 1:40	2	2	0.5	U	0.5	U	ug/L
7440-62-2	Vanadium	EPA 6020A	11/01/2014 1:40	2	2	18.6		18.6		ug/L
7440-66-6	Zinc	EPA 6020A	11/03/2014 20:55	2	40	10	U	10	U	ug/L

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB
Melrose AFB Semi-Annual
SDG: 214102205

COC Sample ID: **MA01MW003**
Location ID: **NA**
Lab Sample ID: **21410220507**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/21/2014 12:26**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7439-97-6	Mercury	EPA 7470A	10/23/2014 15:15	1	0.2	0.07	U	0.07	U	ug/L	
7439-97-6	Mercury, Dissolved	EPA 7470A Dissolved	10/27/2014 15:09	1	0.2	0.07	U	0.07	UJ	ug/L	*
7439-95-4	Magnesium, Dissolved	EPA 6020A Dissolved	10/31/2014 3:03	100	10000	62300		62300		ug/L	
7440-23-5	Sodium, Dissolved	EPA 6020A Dissolved	10/31/2014 3:03	100	10000	449000		449000		ug/L	
7429-90-5	Aluminum, Dissolved	EPA 6020A Dissolved	10/31/2014 3:11	5	100	25	U	25	U	ug/L	
7440-36-0	Antimony, Dissolved	EPA 6020A Dissolved	10/31/2014 3:11	5	10	2.5	U	2.5	U	ug/L	
7440-38-2	Arsenic, Dissolved	EPA 6020A Dissolved	10/31/2014 3:11	5	5	1.25	U	1.25	U	ug/L	
7440-39-3	Barium, Dissolved	EPA 6020A Dissolved	10/31/2014 3:11	5	5	14.7		14.7		ug/L	
7440-41-7	Beryllium, Dissolved	EPA 6020A Dissolved	10/31/2014 3:11	5	5	1.25	U	1.25	U	ug/L	
7440-43-9	Cadmium, Dissolved	EPA 6020A Dissolved	10/31/2014 3:11	5	5	1.25	U	1.25	U	ug/L	
7440-70-2	Calcium, Dissolved	EPA 6020A Dissolved	10/31/2014 3:11	5	2500	67200		67200		ug/L	
7440-47-3	Chromium, Dissolved	EPA 6020A Dissolved	10/31/2014 3:11	5	5	1.25	U	1.25	U	ug/L	
7440-48-4	Cobalt, Dissolved	EPA 6020A Dissolved	10/31/2014 3:11	5	5	1.25	U	1.25	U	ug/L	
7440-50-8	Copper, Dissolved	EPA 6020A Dissolved	10/31/2014 3:11	5	5	1.25	U	1.25	U	ug/L	
7439-89-6	Iron, Dissolved	EPA 6020A Dissolved	10/31/2014 3:11	5	500	125	U	125	U	ug/L	
7439-92-1	Lead, Dissolved	EPA 6020A Dissolved	10/31/2014 3:11	5	5	1.25	U	1.25	U	ug/L	
7439-96-5	Manganese, Dissolved	EPA 6020A Dissolved	10/31/2014 3:11	5	25	6.25	U	6.25	U	ug/L	
7439-98-7	Molybdenum, Dissolved	EPA 6020A Dissolved	10/31/2014 3:11	5	5	3.98	J	3.98	J	ug/L	
7440-02-0	Nickel, Dissolved	EPA 6020A Dissolved	10/31/2014 3:11	5	10	2.5	U	2.5	U	ug/L	
7440-09-7	Potassium, Dissolved	EPA 6020A Dissolved	10/31/2014 3:11	5	500	6960		6960		ug/L	

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB
Melrose AFB Semi-Annual
SDG: 214102205

COC Sample ID: **MA01MW003**
Location ID: **NA**
Lab Sample ID: **21410220507**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/21/2014 12:26**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7782-49-2	Selenium, Dissolved	EPA 6020A Dissolved	10/31/2014 3:11	5	5	3.79	J	3.79	J	ug/L	
7440-22-4	Silver, Dissolved	EPA 6020A Dissolved	10/31/2014 3:11	5	5	1.25	U	1.25	U	ug/L	
7440-28-0	Thallium, Dissolved	EPA 6020A Dissolved	10/31/2014 3:11	5	5	1.25	U	1.25	UJ	ug/L	*
7440-32-6	Titanium, Dissolved	EPA 6020A Dissolved	10/31/2014 3:11	5	5	1.25	U	1.25	U	ug/L	
7440-62-2	Vanadium, Dissolved	EPA 6020A Dissolved	10/31/2014 3:11	5	5	12.9		12.9		ug/L	
7440-66-6	Zinc, Dissolved	EPA 6020A Dissolved	10/31/2014 3:11	5	100	25	U	25	U	ug/L	
7439-95-4	Magnesium	EPA 6020A	11/01/2014 1:55	100	10000	64100		64100		ug/L	
7440-23-5	Sodium	EPA 6020A	11/01/2014 1:55	100	10000	466000		466000		ug/L	
7429-90-5	Aluminum	EPA 6020A	11/01/2014 2:02	5	100	25	U	25	U	ug/L	
7440-36-0	Antimony	EPA 6020A	11/01/2014 2:02	5	10	2.5	U	2.5	U	ug/L	
7440-38-2	Arsenic	EPA 6020A	11/01/2014 2:02	5	5	1.25	U	1.25	U	ug/L	
7440-39-3	Barium	EPA 6020A	11/01/2014 2:02	5	5	15		15		ug/L	
7440-41-7	Beryllium	EPA 6020A	11/01/2014 2:02	5	5	1.25	U	1.25	U	ug/L	
7440-43-9	Cadmium	EPA 6020A	11/01/2014 2:02	5	5	1.25	U	1.25	U	ug/L	
7440-70-2	Calcium	EPA 6020A	11/01/2014 2:02	5	2500	69800		69800		ug/L	
7440-47-3	Chromium	EPA 6020A	11/01/2014 2:02	5	5	1.25	U	1.25	U	ug/L	
7440-48-4	Cobalt	EPA 6020A	11/01/2014 2:02	5	5	1.25	U	1.25	U	ug/L	
7440-50-8	Copper	EPA 6020A	11/01/2014 2:02	5	5	1.37	J	1.37	J	ug/L	
7439-89-6	Iron	EPA 6020A	11/01/2014 2:02	5	500	125	U	125	U	ug/L	
7439-92-1	Lead	EPA 6020A	11/01/2014 2:02	5	5	1.25	U	1.25	U	ug/L	
7439-96-5	Manganese	EPA 6020A	11/01/2014 2:02	5	25	6.25	U	6.25	U	ug/L	
7439-98-7	Molybdenum	EPA 6020A	11/01/2014 2:02	5	5	3.93	J	3.93	J	ug/L	
7440-02-0	Nickel	EPA 6020A	11/01/2014 2:02	5	10	2.5	U	2.5	U	ug/L	
7440-09-7	Potassium	EPA 6020A	11/01/2014 2:02	5	500	7180		7180		ug/L	
7782-49-2	Selenium	EPA 6020A	11/01/2014 2:02	5	5	4.4	J	4.4	J	ug/L	
7440-22-4	Silver	EPA 6020A	11/01/2014 2:02	5	5	1.25	U	1.25	U	ug/L	

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB
Melrose AFB Semi-Annual
SDG: 214102205

COC Sample ID: **MA01MW003**
Location ID: **NA**
Lab Sample ID: **21410220507**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/21/2014 12:26**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7440-28-0	Thallium	EPA 6020A	11/01/2014 2:02	5	5	1.25	U	1.25	U	ug/L
7440-32-6	Titanium	EPA 6020A	11/01/2014 2:02	5	5	1.25	U	1.25	U	ug/L
7440-62-2	Vanadium	EPA 6020A	11/01/2014 2:02	5	5	13.5		13.5		ug/L
7440-66-6	Zinc	EPA 6020A	11/03/2014 20:57	5	100	26.3	J	26.3	J	ug/L

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB
Melrose AFB Semi-Annual
SDG: 214102205

COC Sample ID: **M114MW002**
Location ID: **NA**
Lab Sample ID: **21410220509**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/22/2014 9:35**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7439-97-6	Mercury, Dissolved	EPA 7470A Dissolved	10/27/2014 15:14	1	0.2	0.07	U	0.07	UJ	ug/L	*
7439-97-6	Mercury	EPA 7470A	10/28/2014 11:53	1	0.2	0.07	U	0.07	U	ug/L	
7439-95-4	Magnesium	EPA 6020A	11/03/2014 22:30	500	50000	264000		264000		ug/L	
7440-23-5	Sodium	EPA 6020A	11/03/2014 22:30	500	50000	2130000		2130000		ug/L	
7429-90-5	Aluminum	EPA 6020A	11/03/2014 22:37	20	400	100	U	100	U	ug/L	
7440-36-0	Antimony	EPA 6020A	11/03/2014 22:37	20	40	10	U	10	U	ug/L	
7440-38-2	Arsenic	EPA 6020A	11/03/2014 22:37	20	20	5	U	5	U	ug/L	
7440-39-3	Barium	EPA 6020A	11/03/2014 22:37	20	20	15.2	J	15.2	J	ug/L	
7440-41-7	Beryllium	EPA 6020A	11/03/2014 22:37	20	20	5	U	5	U	ug/L	
7440-43-9	Cadmium	EPA 6020A	11/03/2014 22:37	20	20	5	U	5	U	ug/L	
7440-70-2	Calcium	EPA 6020A	11/03/2014 22:37	20	10000	346000		346000		ug/L	
7440-47-3	Chromium	EPA 6020A	11/03/2014 22:37	20	20	5	U	5	U	ug/L	
7440-48-4	Cobalt	EPA 6020A	11/03/2014 22:37	20	20	5	U	5	U	ug/L	
7440-50-8	Copper	EPA 6020A	11/03/2014 22:37	20	20	5	U	5	U	ug/L	
7439-89-6	Iron	EPA 6020A	11/03/2014 22:37	20	2000	500	U	500	U	ug/L	
7439-92-1	Lead	EPA 6020A	11/03/2014 22:37	20	20	5	U	5	U	ug/L	
7439-96-5	Manganese	EPA 6020A	11/03/2014 22:37	20	100	25	U	25	U	ug/L	
7439-98-7	Molybdenum	EPA 6020A	11/03/2014 22:37	20	20	14.1	J	14.1	J	ug/L	
7440-02-0	Nickel	EPA 6020A	11/03/2014 22:37	20	40	10	U	10	U	ug/L	
7440-09-7	Potassium	EPA 6020A	11/03/2014 22:37	20	2000	14500		14500		ug/L	
7782-49-2	Selenium	EPA 6020A	11/03/2014 22:37	20	20	18.7	J	18.7	J	ug/L	
7440-22-4	Silver	EPA 6020A	11/03/2014 22:37	20	20	5	U	5	U	ug/L	
7440-28-0	Thallium	EPA 6020A	11/03/2014 22:37	20	20	5	U	5	U	ug/L	
7440-32-6	Titanium	EPA 6020A	11/03/2014 22:37	20	20	5	U	5	U	ug/L	
7440-62-2	Vanadium	EPA 6020A	11/03/2014 22:37	20	20	7.27	J	7.27	J	ug/L	
7440-66-6	Zinc	EPA 6020A	11/03/2014 22:37	20	400	100	U	100	U	ug/L	
7439-95-4	Magnesium, Dissolved	EPA 6020A Dissolved	11/04/2014 11:49	500	50000	313000		313000		ug/L	
7440-23-5	Sodium, Dissolved	EPA 6020A Dissolved	11/04/2014 11:49	500	50000	2470000		2470000		ug/L	

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB
Melrose AFB Semi-Annual
SDG: 214102205

COC Sample ID: **M114MW002**
Location ID: **NA**
Lab Sample ID: **21410220509**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/22/2014 9:35**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7429-90-5	Aluminum, Dissolved	EPA 6020A Dissolved	11/04/2014 11:52	20	400	100	U	100	U	ug/L	
7440-36-0	Antimony, Dissolved	EPA 6020A Dissolved	11/04/2014 11:52	20	40	10	U	10	U	ug/L	
7440-38-2	Arsenic, Dissolved	EPA 6020A Dissolved	11/04/2014 11:52	20	20	5	U	5	U	ug/L	
7440-39-3	Barium, Dissolved	EPA 6020A Dissolved	11/04/2014 11:52	20	20	14.3	J	14.3	J	ug/L	
7440-41-7	Beryllium, Dissolved	EPA 6020A Dissolved	11/04/2014 11:52	20	20	5	U	5	U	ug/L	
7440-43-9	Cadmium, Dissolved	EPA 6020A Dissolved	11/04/2014 11:52	20	20	5	U	5	U	ug/L	
7440-70-2	Calcium, Dissolved	EPA 6020A Dissolved	11/04/2014 11:52	20	10000	340000		340000		ug/L	
7440-47-3	Chromium, Dissolved	EPA 6020A Dissolved	11/04/2014 11:52	20	20	5	U	5	U	ug/L	
7440-48-4	Cobalt, Dissolved	EPA 6020A Dissolved	11/04/2014 11:52	20	20	5	U	5	U	ug/L	
7440-50-8	Copper, Dissolved	EPA 6020A Dissolved	11/04/2014 11:52	20	20	5	U	5	U	ug/L	
7439-89-6	Iron, Dissolved	EPA 6020A Dissolved	11/04/2014 11:52	20	2000	500	U	500	U	ug/L	
7439-92-1	Lead, Dissolved	EPA 6020A Dissolved	11/04/2014 11:52	20	20	5	U	5	U	ug/L	
7439-96-5	Manganese, Dissolved	EPA 6020A Dissolved	11/04/2014 11:52	20	100	25	U	25	U	ug/L	
7439-98-7	Molybdenum, Dissolved	EPA 6020A Dissolved	11/04/2014 11:52	20	20	15.7	J	15.7	J	ug/L	
7440-02-0	Nickel, Dissolved	EPA 6020A Dissolved	11/04/2014 11:52	20	40	10	U	10	U	ug/L	
7440-09-7	Potassium, Dissolved	EPA 6020A Dissolved	11/04/2014 11:52	20	2000	14400		14400		ug/L	
7782-49-2	Selenium, Dissolved	EPA 6020A Dissolved	11/04/2014 11:52	20	20	15	J	15	J	ug/L	
7440-22-4	Silver, Dissolved	EPA 6020A Dissolved	11/04/2014 11:52	20	20	5	U	5	U	ug/L	
7440-28-0	Thallium, Dissolved	EPA 6020A Dissolved	11/04/2014 11:52	20	20	5	U	5	UJ	ug/L	*
7440-32-6	Titanium, Dissolved	EPA 6020A Dissolved	11/04/2014 11:52	20	20	5	U	5	U	ug/L	

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **M114MW002**
Location ID: **NA**
Lab Sample ID: **21410220509**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/22/2014 9:35**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7440-62-2	Vanadium, Dissolved	EPA 6020A Dissolved	11/04/2014 11:52	20	20	7.92	J	7.92	J	ug/L
7440-66-6	Zinc, Dissolved	EPA 6020A Dissolved	11/04/2014 11:52	20	400	100	U	100	U	ug/L

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB
Melrose AFB Semi-Annual
SDG: 214102205

COC Sample ID: **M114MW003**
Location ID: **NA**
Lab Sample ID: **21410220511**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/22/2014 11:10**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7439-97-6	Mercury, Dissolved	EPA 7470A Dissolved	10/27/2014 15:16	1	0.2	0.07	U	0.07	UJ	ug/L	*
7439-97-6	Mercury	EPA 7470A	10/28/2014 11:54	1	0.2	0.07	U	0.07	U	ug/L	
7439-95-4	Magnesium	EPA 6020A	11/03/2014 22:44	500	50000	293000		293000		ug/L	
7440-23-5	Sodium	EPA 6020A	11/03/2014 22:44	500	50000	2640000		2640000		ug/L	
7429-90-5	Aluminum	EPA 6020A	11/03/2014 22:52	20	400	100	U	100	U	ug/L	
7440-36-0	Antimony	EPA 6020A	11/03/2014 22:52	20	40	10	U	10	U	ug/L	
7440-38-2	Arsenic	EPA 6020A	11/03/2014 22:52	20	20	5	U	5	U	ug/L	
7440-39-3	Barium	EPA 6020A	11/03/2014 22:52	20	20	13.6	J	13.6	J	ug/L	
7440-41-7	Beryllium	EPA 6020A	11/03/2014 22:52	20	20	5	U	5	U	ug/L	
7440-43-9	Cadmium	EPA 6020A	11/03/2014 22:52	20	20	5	U	5	U	ug/L	
7440-70-2	Calcium	EPA 6020A	11/03/2014 22:52	20	10000	413000		413000		ug/L	
7440-47-3	Chromium	EPA 6020A	11/03/2014 22:52	20	20	5	U	5	U	ug/L	
7440-48-4	Cobalt	EPA 6020A	11/03/2014 22:52	20	20	5	U	5	U	ug/L	
7440-50-8	Copper	EPA 6020A	11/03/2014 22:52	20	20	5	U	5	U	ug/L	
7439-89-6	Iron	EPA 6020A	11/03/2014 22:52	20	2000	500	U	500	U	ug/L	
7439-92-1	Lead	EPA 6020A	11/03/2014 22:52	20	20	5	U	5	U	ug/L	
7439-96-5	Manganese	EPA 6020A	11/03/2014 22:52	20	100	25	U	25	U	ug/L	
7439-98-7	Molybdenum	EPA 6020A	11/03/2014 22:52	20	20	7.73	J	7.73	J	ug/L	
7440-02-0	Nickel	EPA 6020A	11/03/2014 22:52	20	40	10	U	10	U	ug/L	
7440-09-7	Potassium	EPA 6020A	11/03/2014 22:52	20	2000	14700		14700		ug/L	
7782-49-2	Selenium	EPA 6020A	11/03/2014 22:52	20	20	31.7		31.7		ug/L	
7440-22-4	Silver	EPA 6020A	11/03/2014 22:52	20	20	5	U	5	U	ug/L	
7440-28-0	Thallium	EPA 6020A	11/03/2014 22:52	20	20	5	U	5	U	ug/L	
7440-32-6	Titanium	EPA 6020A	11/03/2014 22:52	20	20	5	U	5	U	ug/L	
7440-62-2	Vanadium	EPA 6020A	11/03/2014 22:52	20	20	9.38	J	9.38	J	ug/L	
7440-66-6	Zinc	EPA 6020A	11/03/2014 22:52	20	400	100	U	100	U	ug/L	
7439-95-4	Magnesium, Dissolved	EPA 6020A Dissolved	11/04/2014 12:17	500	50000	328000		328000		ug/L	
7440-23-5	Sodium, Dissolved	EPA 6020A Dissolved	11/04/2014 12:17	500	50000	2950000		2950000		ug/L	

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB
Melrose AFB Semi-Annual
SDG: 214102205

COC Sample ID: **M114MW003**
Location ID: **NA**
Lab Sample ID: **21410220511**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/22/2014 11:10**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7429-90-5	Aluminum, Dissolved	EPA 6020A Dissolved	11/04/2014 12:20	20	400	100	U	100	U	ug/L	
7440-36-0	Antimony, Dissolved	EPA 6020A Dissolved	11/04/2014 12:20	20	40	10	U	10	U	ug/L	
7440-38-2	Arsenic, Dissolved	EPA 6020A Dissolved	11/04/2014 12:20	20	20	5	U	5	U	ug/L	
7440-39-3	Barium, Dissolved	EPA 6020A Dissolved	11/04/2014 12:20	20	20	12.9	J	12.9	J	ug/L	
7440-41-7	Beryllium, Dissolved	EPA 6020A Dissolved	11/04/2014 12:20	20	20	5	U	5	U	ug/L	
7440-43-9	Cadmium, Dissolved	EPA 6020A Dissolved	11/04/2014 12:20	20	20	5	U	5	U	ug/L	
7440-70-2	Calcium, Dissolved	EPA 6020A Dissolved	11/04/2014 12:20	20	10000	410000		410000		ug/L	
7440-47-3	Chromium, Dissolved	EPA 6020A Dissolved	11/04/2014 12:20	20	20	5	U	5	U	ug/L	
7440-48-4	Cobalt, Dissolved	EPA 6020A Dissolved	11/04/2014 12:20	20	20	5	U	5	U	ug/L	
7440-50-8	Copper, Dissolved	EPA 6020A Dissolved	11/04/2014 12:20	20	20	5	U	5	U	ug/L	
7439-89-6	Iron, Dissolved	EPA 6020A Dissolved	11/04/2014 12:20	20	2000	3590		3590		ug/L	
7439-92-1	Lead, Dissolved	EPA 6020A Dissolved	11/04/2014 12:20	20	20	5	U	5	U	ug/L	
7439-96-5	Manganese, Dissolved	EPA 6020A Dissolved	11/04/2014 12:20	20	100	25	U	25	U	ug/L	
7439-98-7	Molybdenum, Dissolved	EPA 6020A Dissolved	11/04/2014 12:20	20	20	8.12	J	8.12	J	ug/L	
7440-02-0	Nickel, Dissolved	EPA 6020A Dissolved	11/04/2014 12:20	20	40	10	U	10	U	ug/L	
7440-09-7	Potassium, Dissolved	EPA 6020A Dissolved	11/04/2014 12:20	20	2000	14800		14800		ug/L	
7782-49-2	Selenium, Dissolved	EPA 6020A Dissolved	11/04/2014 12:20	20	20	28.7		28.7		ug/L	
7440-22-4	Silver, Dissolved	EPA 6020A Dissolved	11/04/2014 12:20	20	20	5	U	5	U	ug/L	
7440-28-0	Thallium, Dissolved	EPA 6020A Dissolved	11/04/2014 12:20	20	20	5	U	5	UJ	ug/L	*
7440-32-6	Titanium, Dissolved	EPA 6020A Dissolved	11/04/2014 12:20	20	20	5	U	5	U	ug/L	

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **M114MW003**
Location ID: **NA**
Lab Sample ID: **21410220511**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/22/2014 11:10**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7440-62-2	Vanadium, Dissolved	EPA 6020A Dissolved	11/04/2014 12:20	20	20	9.77	J	9.77	J	ug/L
7440-66-6	Zinc, Dissolved	EPA 6020A Dissolved	11/04/2014 12:20	20	400	100	U	100	U	ug/L

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB
Melrose AFB Semi-Annual
SDG: 214102205

COC Sample ID: **M114MW004**
Location ID: **NA**
Lab Sample ID: **21410220512**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/22/2014 10:25**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7439-97-6	Mercury, Dissolved	EPA 7470A Dissolved	10/27/2014 15:17	1	0.2	0.07	U	0.07	UJ	ug/L	*
7439-97-6	Mercury	EPA 7470A	10/28/2014 11:56	1	0.2	0.07	U	0.07	U	ug/L	
7439-95-4	Magnesium	EPA 6020A	11/03/2014 22:59	500	50000	316000		316000		ug/L	
7440-23-5	Sodium	EPA 6020A	11/03/2014 22:59	500	50000	2380000		2380000		ug/L	
7429-90-5	Aluminum	EPA 6020A	11/03/2014 23:07	20	400	100	U	100	U	ug/L	
7440-36-0	Antimony	EPA 6020A	11/03/2014 23:07	20	40	10	U	10	U	ug/L	
7440-38-2	Arsenic	EPA 6020A	11/03/2014 23:07	20	20	5	U	5	U	ug/L	
7440-39-3	Barium	EPA 6020A	11/03/2014 23:07	20	20	17.7	J	17.7	J	ug/L	
7440-41-7	Beryllium	EPA 6020A	11/03/2014 23:07	20	20	5	U	5	U	ug/L	
7440-43-9	Cadmium	EPA 6020A	11/03/2014 23:07	20	20	5	U	5	U	ug/L	
7440-70-2	Calcium	EPA 6020A	11/03/2014 23:07	20	10000	402000		402000		ug/L	
7440-47-3	Chromium	EPA 6020A	11/03/2014 23:07	20	20	5	U	5	U	ug/L	
7440-48-4	Cobalt	EPA 6020A	11/03/2014 23:07	20	20	5	U	5	U	ug/L	
7440-50-8	Copper	EPA 6020A	11/03/2014 23:07	20	20	5	U	5	U	ug/L	
7439-89-6	Iron	EPA 6020A	11/03/2014 23:07	20	2000	500	U	500	U	ug/L	
7439-92-1	Lead	EPA 6020A	11/03/2014 23:07	20	20	5	U	5	U	ug/L	
7439-96-5	Manganese	EPA 6020A	11/03/2014 23:07	20	100	25	U	25	U	ug/L	
7439-98-7	Molybdenum	EPA 6020A	11/03/2014 23:07	20	20	10.5	J	10.5	J	ug/L	
7440-02-0	Nickel	EPA 6020A	11/03/2014 23:07	20	40	10	U	10	U	ug/L	
7440-09-7	Potassium	EPA 6020A	11/03/2014 23:07	20	2000	15300		15300		ug/L	
7782-49-2	Selenium	EPA 6020A	11/03/2014 23:07	20	20	23.6		23.6		ug/L	
7440-22-4	Silver	EPA 6020A	11/03/2014 23:07	20	20	5	U	5	U	ug/L	
7440-28-0	Thallium	EPA 6020A	11/03/2014 23:07	20	20	5	U	5	U	ug/L	
7440-32-6	Titanium	EPA 6020A	11/03/2014 23:07	20	20	5	U	5	U	ug/L	
7440-62-2	Vanadium	EPA 6020A	11/03/2014 23:07	20	20	5.48	J	5.48	J	ug/L	
7440-66-6	Zinc	EPA 6020A	11/03/2014 23:07	20	400	100	U	100	U	ug/L	
7439-95-4	Magnesium, Dissolved	EPA 6020A Dissolved	11/04/2014 12:22	500	50000	358000		358000		ug/L	
7440-23-5	Sodium, Dissolved	EPA 6020A Dissolved	11/04/2014 12:22	500	50000	2620000		2620000		ug/L	

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB
Melrose AFB Semi-Annual
SDG: 214102205

COC Sample ID: **M114MW004**
Location ID: **NA**
Lab Sample ID: **21410220512**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/22/2014 10:25**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7429-90-5	Aluminum, Dissolved	EPA 6020A Dissolved	11/04/2014 12:25	20	400	100	U	100	U	ug/L	
7440-36-0	Antimony, Dissolved	EPA 6020A Dissolved	11/04/2014 12:25	20	40	10	U	10	U	ug/L	
7440-38-2	Arsenic, Dissolved	EPA 6020A Dissolved	11/04/2014 12:25	20	20	5	U	5	U	ug/L	
7440-39-3	Barium, Dissolved	EPA 6020A Dissolved	11/04/2014 12:25	20	20	15.2	J	15.2	J	ug/L	
7440-41-7	Beryllium, Dissolved	EPA 6020A Dissolved	11/04/2014 12:25	20	20	5	U	5	U	ug/L	
7440-43-9	Cadmium, Dissolved	EPA 6020A Dissolved	11/04/2014 12:25	20	20	5	U	5	U	ug/L	
7440-70-2	Calcium, Dissolved	EPA 6020A Dissolved	11/04/2014 12:25	20	10000	404000		404000		ug/L	
7440-47-3	Chromium, Dissolved	EPA 6020A Dissolved	11/04/2014 12:25	20	20	5	U	5	U	ug/L	
7440-48-4	Cobalt, Dissolved	EPA 6020A Dissolved	11/04/2014 12:25	20	20	5	U	5	U	ug/L	
7440-50-8	Copper, Dissolved	EPA 6020A Dissolved	11/04/2014 12:25	20	20	5	U	5	U	ug/L	
7439-89-6	Iron, Dissolved	EPA 6020A Dissolved	11/04/2014 12:25	20	2000	500	U	500	U	ug/L	
7439-92-1	Lead, Dissolved	EPA 6020A Dissolved	11/04/2014 12:25	20	20	5	U	5	U	ug/L	
7439-96-5	Manganese, Dissolved	EPA 6020A Dissolved	11/04/2014 12:25	20	100	25	U	25	U	ug/L	
7439-98-7	Molybdenum, Dissolved	EPA 6020A Dissolved	11/04/2014 12:25	20	20	11.5	J	11.5	J	ug/L	
7440-02-0	Nickel, Dissolved	EPA 6020A Dissolved	11/04/2014 12:25	20	40	10	U	10	U	ug/L	
7440-09-7	Potassium, Dissolved	EPA 6020A Dissolved	11/04/2014 12:25	20	2000	15600		15600		ug/L	
7782-49-2	Selenium, Dissolved	EPA 6020A Dissolved	11/04/2014 12:25	20	20	21.9		21.9		ug/L	
7440-22-4	Silver, Dissolved	EPA 6020A Dissolved	11/04/2014 12:25	20	20	5	U	5	U	ug/L	
7440-28-0	Thallium, Dissolved	EPA 6020A Dissolved	11/04/2014 12:25	20	20	5	U	5	UJ	ug/L	*
7440-32-6	Titanium, Dissolved	EPA 6020A Dissolved	11/04/2014 12:25	20	20	5	U	5	U	ug/L	

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **M114MW004**
Location ID: **NA**
Lab Sample ID: **21410220512**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/22/2014 10:25**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7440-62-2	Vanadium, Dissolved	EPA 6020A Dissolved	11/04/2014 12:25	20	20	5.78	J	5.78	J	ug/L
7440-66-6	Zinc, Dissolved	EPA 6020A Dissolved	11/04/2014 12:25	20	400	102	J	102	J	ug/L

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB
Melrose AFB Semi-Annual
SDG: 214102205

COC Sample ID: **M114MW001**
Location ID: **NA**
Lab Sample ID: **21410220514**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/22/2014 12:35**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7439-97-6	Mercury, Dissolved	EPA 7470A Dissolved	10/27/2014 15:19	1	0.2	0.07	U	0.07	UJ	ug/L	*
7439-97-6	Mercury	EPA 7470A	10/28/2014 11:58	1	0.2	0.07	U	0.07	U	ug/L	
7439-95-4	Magnesium	EPA 6020A	11/03/2014 23:36	500	50000	242000		242000		ug/L	
7440-23-5	Sodium	EPA 6020A	11/03/2014 23:36	500	50000	2020000		2020000		ug/L	
7429-90-5	Aluminum	EPA 6020A	11/03/2014 23:44	10	200	50	U	50	U	ug/L	
7440-36-0	Antimony	EPA 6020A	11/03/2014 23:44	10	20	5	U	5	U	ug/L	
7440-38-2	Arsenic	EPA 6020A	11/03/2014 23:44	10	10	2.5	U	2.5	U	ug/L	
7440-39-3	Barium	EPA 6020A	11/03/2014 23:44	10	10	18.1		18.1		ug/L	
7440-43-9	Cadmium	EPA 6020A	11/03/2014 23:44	10	10	2.5	U	2.5	U	ug/L	
7440-70-2	Calcium	EPA 6020A	11/03/2014 23:44	10	5000	317000		317000		ug/L	
7440-47-3	Chromium	EPA 6020A	11/03/2014 23:44	10	10	3.92	J	3.92	J	ug/L	
7440-48-4	Cobalt	EPA 6020A	11/03/2014 23:44	10	10	2.5	U	2.5	U	ug/L	
7440-50-8	Copper	EPA 6020A	11/03/2014 23:44	10	10	2.5	U	2.5	U	ug/L	
7439-89-6	Iron	EPA 6020A	11/03/2014 23:44	10	1000	250	U	250	U	ug/L	
7439-92-1	Lead	EPA 6020A	11/03/2014 23:44	10	10	2.5	U	2.5	U	ug/L	
7439-96-5	Manganese	EPA 6020A	11/03/2014 23:44	10	50	12.5	U	12.5	U	ug/L	
7439-98-7	Molybdenum	EPA 6020A	11/03/2014 23:44	10	10	16.1		16.1		ug/L	
7440-02-0	Nickel	EPA 6020A	11/03/2014 23:44	10	20	5	U	5	U	ug/L	
7440-09-7	Potassium	EPA 6020A	11/03/2014 23:44	10	1000	13900		13900		ug/L	
7782-49-2	Selenium	EPA 6020A	11/03/2014 23:44	10	10	29.2		29.2		ug/L	
7440-22-4	Silver	EPA 6020A	11/03/2014 23:44	10	10	2.5	U	2.5	U	ug/L	
7440-32-6	Titanium	EPA 6020A	11/03/2014 23:44	10	10	2.5	U	2.5	U	ug/L	
7440-62-2	Vanadium	EPA 6020A	11/03/2014 23:44	10	10	6.5	J	6.5	J	ug/L	
7440-66-6	Zinc	EPA 6020A	11/03/2014 23:44	10	200	59.7	J	59.7	J	ug/L	
7439-95-4	Magnesium, Dissolved	EPA 6020A Dissolved	11/04/2014 12:27	500	50000	283000		283000		ug/L	
7440-23-5	Sodium, Dissolved	EPA 6020A Dissolved	11/04/2014 12:27	500	50000	2350000		2350000		ug/L	
7429-90-5	Aluminum, Dissolved	EPA 6020A Dissolved	11/04/2014 12:30	10	200	50	U	50	U	ug/L	

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB
Melrose AFB Semi-Annual
SDG: 214102205

COC Sample ID: **M114MW001**
Location ID: **NA**
Lab Sample ID: **21410220514**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/22/2014 12:35**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7440-36-0	Antimony, Dissolved	EPA 6020A Dissolved	11/04/2014 12:30	10	20	5	U	5	U	ug/L	
7440-38-2	Arsenic, Dissolved	EPA 6020A Dissolved	11/04/2014 12:30	10	10	2.5	U	2.5	U	ug/L	
7440-39-3	Barium, Dissolved	EPA 6020A Dissolved	11/04/2014 12:30	10	10	14.7		14.7		ug/L	
7440-41-7	Beryllium, Dissolved	EPA 6020A Dissolved	11/04/2014 12:30	10	10	2.5	U	2.5	U	ug/L	
7440-43-9	Cadmium, Dissolved	EPA 6020A Dissolved	11/04/2014 12:30	10	10	2.5	U	2.5	U	ug/L	
7440-70-2	Calcium, Dissolved	EPA 6020A Dissolved	11/04/2014 12:30	10	5000	301000		301000		ug/L	
7440-47-3	Chromium, Dissolved	EPA 6020A Dissolved	11/04/2014 12:30	10	10	3.98	J	3.98	J	ug/L	
7440-48-4	Cobalt, Dissolved	EPA 6020A Dissolved	11/04/2014 12:30	10	10	2.5	U	2.5	U	ug/L	
7440-50-8	Copper, Dissolved	EPA 6020A Dissolved	11/04/2014 12:30	10	10	2.5	U	2.5	U	ug/L	
7439-89-6	Iron, Dissolved	EPA 6020A Dissolved	11/04/2014 12:30	10	1000	250	U	250	U	ug/L	
7439-92-1	Lead, Dissolved	EPA 6020A Dissolved	11/04/2014 12:30	10	10	2.5	U	2.5	U	ug/L	
7439-96-5	Manganese, Dissolved	EPA 6020A Dissolved	11/04/2014 12:30	10	50	12.5	U	12.5	U	ug/L	
7439-98-7	Molybdenum, Dissolved	EPA 6020A Dissolved	11/04/2014 12:30	10	10	15.1		15.1		ug/L	
7440-02-0	Nickel, Dissolved	EPA 6020A Dissolved	11/04/2014 12:30	10	20	5	U	5	U	ug/L	
7440-09-7	Potassium, Dissolved	EPA 6020A Dissolved	11/04/2014 12:30	10	1000	13200		13200		ug/L	
7782-49-2	Selenium, Dissolved	EPA 6020A Dissolved	11/04/2014 12:30	10	10	25.8		25.8		ug/L	
7440-22-4	Silver, Dissolved	EPA 6020A Dissolved	11/04/2014 12:30	10	10	2.5	U	2.5	U	ug/L	
7440-28-0	Thallium, Dissolved	EPA 6020A Dissolved	11/04/2014 12:30	10	10	2.5	U	2.5	UJ	ug/L	*
7440-32-6	Titanium, Dissolved	EPA 6020A Dissolved	11/04/2014 12:30	10	10	2.5	U	2.5	U	ug/L	
7440-62-2	Vanadium, Dissolved	EPA 6020A Dissolved	11/04/2014 12:30	10	10	6.58	J	6.58	J	ug/L	

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **M114MW001**
Location ID: **NA**
Lab Sample ID: **21410220514**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/22/2014 12:35**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7440-66-6	Zinc, Dissolved	EPA 6020A Dissolved	11/04/2014 12:30	10	200	55.3	J	55.3	J	ug/L
7440-41-7	Beryllium	EPA 6020A	11/06/2014 15:08	10	10	2.5	U	2.5	U	ug/L
7440-28-0	Thallium	EPA 6020A	11/06/2014 15:08	10	10	2.5	U	2.5	U	ug/L

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB
Melrose AFB Semi-Annual
SDG: 214102205

COC Sample ID: **MWQ-24**
Location ID: **NA**
Lab Sample ID: **21410220515**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/23/2014 9:32**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7439-97-6	Mercury	EPA 7470A	10/28/2014 12:44	1	0.2	0.07	U	0.07	U	ug/L	
7439-97-6	Mercury, Dissolved	EPA 7470A Dissolved	10/28/2014 12:46	1	0.2	0.07	U	0.07	UJ	ug/L	*
7439-95-4	Magnesium	EPA 6020A	10/31/2014 7:30	10	1000	21000		21000		ug/L	
7440-23-5	Sodium	EPA 6020A	10/31/2014 7:30	10	1000	33000		33000		ug/L	
7429-90-5	Aluminum	EPA 6020A	10/31/2014 7:38	1	20	10.3	J	10.3	J	ug/L	
7440-36-0	Antimony	EPA 6020A	10/31/2014 7:38	1	2	0.5	U	0.5	U	ug/L	
7440-38-2	Arsenic	EPA 6020A	10/31/2014 7:38	1	1	4.77		4.77		ug/L	
7440-39-3	Barium	EPA 6020A	10/31/2014 7:38	1	1	54.8		54.8		ug/L	
7440-41-7	Beryllium	EPA 6020A	10/31/2014 7:38	1	1	0.25	U	0.25	U	ug/L	
7440-43-9	Cadmium	EPA 6020A	10/31/2014 7:38	1	1	0.25	U	0.25	U	ug/L	
7440-70-2	Calcium	EPA 6020A	10/31/2014 7:38	1	500	43600		43600		ug/L	
7440-47-3	Chromium	EPA 6020A	10/31/2014 7:38	1	1	0.57	J	0.57	J	ug/L	
7440-48-4	Cobalt	EPA 6020A	10/31/2014 7:38	1	1	0.25	U	0.25	U	ug/L	
7440-50-8	Copper	EPA 6020A	10/31/2014 7:38	1	1	0.25	U	0.25	U	ug/L	
7439-89-6	Iron	EPA 6020A	10/31/2014 7:38	1	100	25	U	25	U	ug/L	
7439-92-1	Lead	EPA 6020A	10/31/2014 7:38	1	1	0.25	U	0.25	U	ug/L	
7439-96-5	Manganese	EPA 6020A	10/31/2014 7:38	1	5	1.25	U	1.25	U	ug/L	
7439-98-7	Molybdenum	EPA 6020A	10/31/2014 7:38	1	1	9.5		9.5		ug/L	
7440-02-0	Nickel	EPA 6020A	10/31/2014 7:38	1	2	0.5	U	0.5	U	ug/L	
7440-09-7	Potassium	EPA 6020A	10/31/2014 7:38	1	100	3930		3930		ug/L	
7782-49-2	Selenium	EPA 6020A	10/31/2014 7:38	1	1	0.58	J	0.58	J	ug/L	
7440-22-4	Silver	EPA 6020A	10/31/2014 7:38	1	1	0.25	U	0.25	U	ug/L	
7440-28-0	Thallium	EPA 6020A	10/31/2014 7:38	1	1	0.25	U	0.25	U	ug/L	
7440-32-6	Titanium	EPA 6020A	10/31/2014 7:38	1	1	0.25	U	0.25	U	ug/L	
7440-62-2	Vanadium	EPA 6020A	10/31/2014 7:38	1	1	33.4		33.4		ug/L	
7440-66-6	Zinc	EPA 6020A	10/31/2014 7:38	1	20	5	U	5	U	ug/L	
7439-95-4	Magnesium, Dissolved	EPA 6020A Dissolved	11/03/2014 14:55	10	1000	23600		23600		ug/L	
7440-23-5	Sodium, Dissolved	EPA 6020A Dissolved	11/03/2014 14:55	10	1000	37000		37000		ug/L	

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB
Melrose AFB Semi-Annual
SDG: 214102205

COC Sample ID: **MWQ-24**
Location ID: **NA**
Lab Sample ID: **21410220515**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/23/2014 9:32**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7429-90-5	Aluminum, Dissolved	EPA 6020A Dissolved	11/03/2014 15:02	1	20	12.7	J	12.7	J	ug/L
7440-36-0	Antimony, Dissolved	EPA 6020A Dissolved	11/03/2014 15:02	1	2	0.5	U	0.5	U	ug/L
7440-38-2	Arsenic, Dissolved	EPA 6020A Dissolved	11/03/2014 15:02	1	1	4.92		4.92		ug/L
7440-39-3	Barium, Dissolved	EPA 6020A Dissolved	11/03/2014 15:02	1	1	60.7		60.7		ug/L
7440-41-7	Beryllium, Dissolved	EPA 6020A Dissolved	11/03/2014 15:02	1	1	0.25	U	0.25	U	ug/L
7440-43-9	Cadmium, Dissolved	EPA 6020A Dissolved	11/03/2014 15:02	1	1	0.25	U	0.25	U	ug/L
7440-70-2	Calcium, Dissolved	EPA 6020A Dissolved	11/03/2014 15:02	1	500	47800		47800		ug/L
7440-47-3	Chromium, Dissolved	EPA 6020A Dissolved	11/03/2014 15:02	1	1	0.58	J	0.58	J	ug/L
7440-48-4	Cobalt, Dissolved	EPA 6020A Dissolved	11/03/2014 15:02	1	1	0.25	U	0.25	U	ug/L
7440-50-8	Copper, Dissolved	EPA 6020A Dissolved	11/03/2014 15:02	1	1	0.25	U	0.25	U	ug/L
7439-89-6	Iron, Dissolved	EPA 6020A Dissolved	11/03/2014 15:02	1	100	25	U	25	U	ug/L
7439-92-1	Lead, Dissolved	EPA 6020A Dissolved	11/03/2014 15:02	1	1	0.25	U	0.25	U	ug/L
7439-96-5	Manganese, Dissolved	EPA 6020A Dissolved	11/03/2014 15:02	1	5	1.25	U	1.25	U	ug/L
7439-98-7	Molybdenum, Dissolved	EPA 6020A Dissolved	11/03/2014 15:02	1	1	9.93		9.93		ug/L
7440-02-0	Nickel, Dissolved	EPA 6020A Dissolved	11/03/2014 15:02	1	2	0.5	U	0.5	U	ug/L
7440-09-7	Potassium, Dissolved	EPA 6020A Dissolved	11/03/2014 15:02	1	100	4420		4420		ug/L
7782-49-2	Selenium, Dissolved	EPA 6020A Dissolved	11/03/2014 15:02	1	1	0.65	J	0.65	J	ug/L
7440-22-4	Silver, Dissolved	EPA 6020A Dissolved	11/03/2014 15:02	1	1	0.25	U	0.25	U	ug/L
7440-28-0	Thallium, Dissolved	EPA 6020A Dissolved	11/03/2014 15:02	1	1	0.25	U	0.25	U	ug/L
7440-32-6	Titanium, Dissolved	EPA 6020A Dissolved	11/03/2014 15:02	1	1	0.25	U	0.25	U	ug/L

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB
Melrose AFB Semi-Annual
SDG: 214102205

COC Sample ID: **MWQ-24**
Location ID: **NA**
Lab Sample ID: **21410220515**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/23/2014 9:32**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7440-62-2	Vanadium, Dissolved	EPA 6020A Dissolved	11/03/2014 15:02	1	1	34.6		34.6		ug/L
7440-66-6	Zinc, Dissolved	EPA 6020A Dissolved	11/03/2014 15:02	1	20	5	U	5	U	ug/L

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB
Melrose AFB Semi-Annual
SDG: 214102205

COC Sample ID: **MA02MW001D**
Location ID: **NA**
Lab Sample ID: **21410220520**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/23/2014 11:43**

Total/Dissolved: **T**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7439-97-6	Mercury	EPA 7470A	10/28/2014 13:40	1	0.2	0.14399	J	0.14399	J	ug/L	
7439-97-6	Mercury, Dissolved	EPA 7470A Dissolved	10/28/2014 13:41	1	0.2	0.07	U	0.07	UJ	ug/L	*
7440-23-5	Sodium	EPA 6020A	10/30/2014 5:25	500	50000	2030000		2030000		ug/L	
7429-90-5	Aluminum	EPA 6020A	10/30/2014 5:32	20	400	100	U	100	U	ug/L	
7440-36-0	Antimony	EPA 6020A	10/30/2014 5:32	20	40	10	U	10	U	ug/L	
7440-38-2	Arsenic	EPA 6020A	10/30/2014 5:32	20	20	5	U	5	U	ug/L	
7440-39-3	Barium	EPA 6020A	10/30/2014 5:32	20	20	7.67	J	7.67	J	ug/L	
7440-43-9	Cadmium	EPA 6020A	10/30/2014 5:32	20	20	5	U	5	U	ug/L	
7440-70-2	Calcium	EPA 6020A	10/30/2014 5:32	20	10000	132000		132000		ug/L	
7440-47-3	Chromium	EPA 6020A	10/30/2014 5:32	20	20	5	U	5	U	ug/L	
7440-48-4	Cobalt	EPA 6020A	10/30/2014 5:32	20	20	5	U	5	U	ug/L	
7440-50-8	Copper	EPA 6020A	10/30/2014 5:32	20	20	5	U	5	U	ug/L	
7439-89-6	Iron	EPA 6020A	10/30/2014 5:32	20	2000	500	U	500	U	ug/L	
7439-92-1	Lead	EPA 6020A	10/30/2014 5:32	20	20	5	U	5	U	ug/L	
7439-95-4	Magnesium	EPA 6020A	10/30/2014 5:32	20	2000	50000		50000		ug/L	
7439-96-5	Manganese	EPA 6020A	10/30/2014 5:32	20	100	180		180		ug/L	
7439-98-7	Molybdenum	EPA 6020A	10/30/2014 5:32	20	20	16.8	J	16.8	J	ug/L	
7440-02-0	Nickel	EPA 6020A	10/30/2014 5:32	20	40	10	U	10	U	ug/L	
7440-09-7	Potassium	EPA 6020A	10/30/2014 5:32	20	2000	6260		6260		ug/L	
7782-49-2	Selenium	EPA 6020A	10/30/2014 5:32	20	20	33.7		33.7		ug/L	
7440-22-4	Silver	EPA 6020A	10/30/2014 5:32	20	20	5	U	5	U	ug/L	
7440-28-0	Thallium	EPA 6020A	10/30/2014 5:32	20	20	5	U	5	U	ug/L	
7440-32-6	Titanium	EPA 6020A	10/30/2014 5:32	20	20	5	U	5	U	ug/L	
7440-62-2	Vanadium	EPA 6020A	10/30/2014 5:32	20	20	5	U	5	U	ug/L	
7440-66-6	Zinc	EPA 6020A	10/30/2014 5:32	20	400	100	U	100	U	ug/L	
7440-41-7	Beryllium	EPA 6020A	10/31/2014 9:21	20	20	5	U	5	U	ug/L	
7440-23-5	Sodium, Dissolved	EPA 6020A Dissolved	11/03/2014 15:54	500	50000	2110000		2110000		ug/L	
7429-90-5	Aluminum, Dissolved	EPA 6020A Dissolved	11/03/2014 16:02	20	400	100	U	100	U	ug/L	

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB
Melrose AFB Semi-Annual
SDG: 214102205

COC Sample ID: **MA02MW001D**
Location ID: **NA**
Lab Sample ID: **21410220520**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/23/2014 11:43**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
7440-36-0	Antimony, Dissolved	EPA 6020A Dissolved	11/03/2014 16:02	20	40	10	U	10	U	ug/L	
7440-38-2	Arsenic, Dissolved	EPA 6020A Dissolved	11/03/2014 16:02	20	20	5	U	5	U	ug/L	
7440-39-3	Barium, Dissolved	EPA 6020A Dissolved	11/03/2014 16:02	20	20	8.94	J	8.94	J	ug/L	
7440-41-7	Beryllium, Dissolved	EPA 6020A Dissolved	11/03/2014 16:02	20	20	5	U	5	U	ug/L	
7440-43-9	Cadmium, Dissolved	EPA 6020A Dissolved	11/03/2014 16:02	20	20	5	U	5	U	ug/L	
7440-70-2	Calcium, Dissolved	EPA 6020A Dissolved	11/03/2014 16:02	20	10000	141000		141000		ug/L	
7440-47-3	Chromium, Dissolved	EPA 6020A Dissolved	11/03/2014 16:02	20	20	5	U	5	U	ug/L	
7440-48-4	Cobalt, Dissolved	EPA 6020A Dissolved	11/03/2014 16:02	20	20	5	U	5	U	ug/L	
7440-50-8	Copper, Dissolved	EPA 6020A Dissolved	11/03/2014 16:02	20	20	5	U	5	U	ug/L	
7439-89-6	Iron, Dissolved	EPA 6020A Dissolved	11/03/2014 16:02	20	2000	500	U	500	U	ug/L	
7439-92-1	Lead, Dissolved	EPA 6020A Dissolved	11/03/2014 16:02	20	20	5	U	5	U	ug/L	
7439-95-4	Magnesium, Dissolved	EPA 6020A Dissolved	11/03/2014 16:02	20	2000	55300		55300		ug/L	
7439-96-5	Manganese, Dissolved	EPA 6020A Dissolved	11/03/2014 16:02	20	100	190		190		ug/L	
7439-98-7	Molybdenum, Dissolved	EPA 6020A Dissolved	11/03/2014 16:02	20	20	18.7	J	18.7	J	ug/L	
7440-02-0	Nickel, Dissolved	EPA 6020A Dissolved	11/03/2014 16:02	20	40	10	U	10	U	ug/L	
7440-09-7	Potassium, Dissolved	EPA 6020A Dissolved	11/03/2014 16:02	20	2000	7170		7170		ug/L	
7782-49-2	Selenium, Dissolved	EPA 6020A Dissolved	11/03/2014 16:02	20	20	42		42		ug/L	
7440-22-4	Silver, Dissolved	EPA 6020A Dissolved	11/03/2014 16:02	20	20	5	U	5	U	ug/L	
7440-28-0	Thallium, Dissolved	EPA 6020A Dissolved	11/03/2014 16:02	20	20	5	U	5	UJ	ug/L	*
7440-32-6	Titanium, Dissolved	EPA 6020A Dissolved	11/03/2014 16:02	20	20	5	U	5	U	ug/L	

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Metals

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MA02MW001D**
Location ID: **NA**
Lab Sample ID: **21410220520**
Sample Type: **Site Sample**

Sample Matrix : **Water**
Sample Date: **10/23/2014 11:43**

Total/Dissolved: **D**
Lab: **GCAL**

CAS	Parameter Name	Method	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
7440-62-2	Vanadium, Dissolved	EPA 6020A Dissolved	11/03/2014 16:02	20	20	5	U	5	U	ug/L
7440-66-6	Zinc, Dissolved	EPA 6020A Dissolved	11/03/2014 16:02	20	400	100	U	100	U	ug/L

DF = Dilution Factor RL = Reporting Limit
* = Modified by Validation
U = Non-Detect J = Estimated R = Rejected

eDATApro
ENVIRONMENTAL DATA PROFESSIONAL, LLC

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MA01MW002** Sample Matrix : **Water**

Location ID: **NA**

Lab Sample ID: **1410256-01** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: SW-846 6860										
Perchlorate	10/21/2014 10:40	11/06/2014 10:59	1	0.0003	0.00151	N	0.00151		mg/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MA01MW001** Sample Matrix : **Water**

Location ID: **NA**

Lab Sample ID: **1410256-02** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: SW-846 6860										
Perchlorate	10/21/2014 12:20	11/06/2014 11:15	1	0.0003	0.000308	N	0.000308		mg/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MA01MW004** Sample Matrix : **Water**

Location ID: **NA**

Lab Sample ID: **1410256-03** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: SW-846 6860										
Perchlorate	10/21/2014 11:00	11/06/2014 11:31	1	0.0003	0.00381	N	0.00381		mg/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MA01MW004-a** Sample Matrix : **Water**

Location ID: **NA**

Lab Sample ID: **1410256-04** Lab Code: **GCAL**

Sample Type: **Field Duplicate**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: SW-846 6860										
Perchlorate	10/21/2014 11:00	11/06/2014 11:47	1	0.0003	0.00377	N	0.00377		mg/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MA01MW003** Sample Matrix : **Water**

Location ID: **NA**

Lab Sample ID: **1410256-05** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: SW-846 6860										
Perchlorate	10/21/2014 12:26	11/06/2014 12:03	1	0.0003	0.000335	N	0.000335		mg/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **M114MW002** Sample Matrix : **Water**

Location ID: **NA**

Lab Sample ID: **1410256-06** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: SW-846 6860										
Perchlorate	10/22/2014 9:35	11/06/2014 12:19	1	0.0003	0.00229	N	0.00229		mg/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **M114MW003** Sample Matrix : **Water**

Location ID: **NA**

Lab Sample ID: **1410256-07** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: SW-846 6860										
Perchlorate	10/22/2014 11:10	11/06/2014 12:35	1	0.0003	0.00338	N	0.00338		mg/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **M114MW004** Sample Matrix : **Water**

Location ID: **NA**

Lab Sample ID: **1410256-08** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: SW-846 6860										
Perchlorate	10/22/2014 10:25	11/06/2014 12:52	1	0.0003	0.00233	N	0.00233		mg/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **M114MW001** Sample Matrix : **Water**

Location ID: **NA**

Lab Sample ID: **1410256-09** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: SW-846 6860										
Perchlorate	10/22/2014 12:35	11/06/2014 13:08	1	0.0003	0.00301	N	0.00301		mg/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MWQ-24** Sample Matrix : **Water**

Location ID: **NA**

Lab Sample ID: **1410256-10** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: SW-846 6860										
Perchlorate	10/23/2014 9:32	11/06/2014 13:24	1	0.0003	0.000135	JN	0.000135	J	mg/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MA02MW001D** Sample Matrix : **Water**

Location ID: **NA**

Lab Sample ID: **1410256-11** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: SW-846 6860										
Perchlorate	10/23/2014 11:43	11/07/2014 10:30	5	0.0015	0.0149	N	0.0149		mg/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MA01MW002** Sample Matrix : **Water**

Location ID: **NA**

Lab Sample ID: **21410220501** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: EPA 300.0									
Chloride	10/21/2014 10:40	10/25/2014 2:10	200	40	443		443		mg/L
Sulfate	10/21/2014 10:40	10/25/2014 2:10	200	40	534		534		mg/L
Method: EPA 353.2 Nitrate									
Nitrate	10/21/2014 10:40	10/22/2014 17:04	1	0.01	0.458		0.458		mg/L-N
Method: EPA 353.2 Nitrite									
Nitrite	10/21/2014 10:40	10/22/2014 17:38	1	0.01	0.008	J	0.008	J	mg/L-N
Method: EPA 9012B									
Cyanide	10/21/2014 10:40	10/27/2014 19:02	1	0.005	0.0014	J	0.0014	J	mg/L
Method: SM 2320 B-2011									
Total Alkalinity	10/21/2014 10:40	10/23/2014 7:54	1	1	186		186		mg/L
Method: SM 2540 C-2011									
Total Dissolved Solids(TDS)	10/21/2014 10:40	10/23/2014 16:22	1	10	1710		1710		mg/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MA01MW001** Sample Matrix : **Water**

Location ID: **NA**

Lab Sample ID: **21410220503** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: EPA 300.0									
Chloride	10/21/2014 12:20	10/25/2014 3:20	200	40	523		523		mg/L
Sulfate	10/21/2014 12:20	10/25/2014 3:20	200	40	617		617		mg/L
Method: EPA 353.2 Nitrate									
Nitrate	10/21/2014 12:20	10/22/2014 17:08	1	0.01	0.289		0.289		mg/L-N
Method: EPA 353.2 Nitrite									
Nitrite	10/21/2014 12:20	10/22/2014 17:42	1	0.01	0.006	U	0.006	U	mg/L-N
Method: EPA 9012B									
Cyanide	10/21/2014 12:20	10/27/2014 19:03	1	0.005	0.0015	J	0.0015	J	mg/L
Method: SM 2320 B-2011									
Total Alkalinity	10/21/2014 12:20	10/23/2014 7:54	1	1	177		177		mg/L
Method: SM 2540 C-2011									
Total Dissolved Solids(TDS)	10/21/2014 12:20	10/23/2014 16:22	1	10	1890		1890		mg/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MA01MW004** Sample Matrix : **Water**

Location ID: **NA**

Lab Sample ID: **21410220504** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: EPA 300.0									
Chloride	10/21/2014 11:00	10/25/2014 3:55	200	40	255		255		mg/L
Sulfate	10/21/2014 11:00	10/25/2014 3:55	200	40	333		333		mg/L
Method: EPA 353.2 Nitrate									
Nitrate	10/21/2014 11:00	10/22/2014 17:05	2	0.02	0.811		0.811		mg/L-N
Method: EPA 353.2 Nitrite									
Nitrite	10/21/2014 11:00	10/22/2014 17:40	1	0.01	0.006	U	0.006	U	mg/L-N
Method: EPA 9012B									
Cyanide	10/21/2014 11:00	10/27/2014 19:04	1	0.005	0.002	J	0.002	J	mg/L
Method: SM 2320 B-2011									
Total Alkalinity	10/21/2014 11:00	10/23/2014 7:54	1	1	196		196		mg/L
Method: SM 2540 C-2011									
Total Dissolved Solids(TDS)	10/21/2014 11:00	10/23/2014 16:22	1	10	1140		1140		mg/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MA01MW004-a** Sample Matrix : **Water**

Location ID: **NA**

Lab Sample ID: **21410220505** Lab Code: **GCAL**

Sample Type: **Field Duplicate**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: EPA 300.0									
Chloride	10/21/2014 11:00	10/25/2014 4:29	200	40	250		250		mg/L
Sulfate	10/21/2014 11:00	10/25/2014 4:29	200	40	344		344		mg/L
Method: EPA 353.2 Nitrate									
Nitrate	10/21/2014 11:00	10/22/2014 17:06	2	0.02	0.835		0.835		mg/L-N
Method: EPA 353.2 Nitrite									
Nitrite	10/21/2014 11:00	10/22/2014 17:41	1	0.01	0.006	U	0.006	U	mg/L-N
Method: EPA 9012B									
Cyanide	10/21/2014 11:00	10/27/2014 19:08	1	0.005	0.0097		0.0097		mg/L
Method: SM 2320 B-2011									
Total Alkalinity	10/21/2014 11:00	10/23/2014 7:54	1	1	199		199		mg/L
Method: SM 2540 C-2011									
Total Dissolved Solids(TDS)	10/21/2014 11:00	10/23/2014 16:22	1	10	1100		1100		mg/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MA01MW003** Sample Matrix : **Water**

Location ID: **NA**

Lab Sample ID: **21410220507** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: EPA 300.0									
Chloride	10/21/2014 12:26	10/25/2014 5:04	200	40	477		477		mg/L
Sulfate	10/21/2014 12:26	10/25/2014 5:04	200	40	549		549		mg/L
Method: EPA 353.2 Nitrate									
Nitrate	10/21/2014 12:26	10/22/2014 17:09	1	0.01	0.222		0.222		mg/L-N
Method: EPA 353.2 Nitrite									
Nitrite	10/21/2014 12:26	10/22/2014 17:43	1	0.01	0.006	U	0.006	U	mg/L-N
Method: EPA 9012B									
Cyanide	10/21/2014 12:26	10/27/2014 19:09	1	0.005	0.0025	J	0.0025	J	mg/L
Method: SM 2320 B-2011									
Total Alkalinity	10/21/2014 12:26	10/23/2014 7:54	1	1	163		163		mg/L
Method: SM 2540 C-2011									
Total Dissolved Solids(TDS)	10/21/2014 12:26	10/23/2014 16:22	1	10	1790		1790		mg/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **M114MW002** Sample Matrix : **Water**

Location ID: **NA**

Lab Sample ID: **21410220509** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: EPA 300.0										
Chloride	10/22/2014 9:35	10/25/2014 6:15	1000	200	2120		2120		mg/L	
Sulfate	10/22/2014 9:35	10/25/2014 6:15	1000	200	1120		1120		mg/L	
Method: EPA 353.2 Nitrate										
Nitrate	10/22/2014 9:35	10/23/2014 14:33	1	0.01	0.371		0.371		mg/L-N	
Method: EPA 353.2 Nitrite										
Nitrite	10/22/2014 9:35	10/23/2014 14:55	1	0.01	0.006	U	0.006	U	mg/L-N	
Method: EPA 9012B										
Cyanide	10/22/2014 9:35	10/28/2014 12:28	1	0.005	0.0013	J	0.005	U	mg/L	*
Method: SM 2320 B-2011										
Total Alkalinity	10/22/2014 9:35	11/04/2014 19:40	1	1	74.1		74.1		mg/L	
Method: SM 2540 C-2011										
Total Dissolved Solids(TDS)	10/22/2014 9:35	10/23/2014 16:22	1	10	8680		8680		mg/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **M114MW003** Sample Matrix : **Water**

Location ID: **NA**

Lab Sample ID: **21410220511** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: EPA 300.0										
Chloride	10/22/2014 11:10	10/26/2014 19:40	1000	200	4180		4180		mg/L	
Sulfate	10/22/2014 11:10	10/26/2014 19:40	1000	200	2240		2240		mg/L	
Method: EPA 353.2 Nitrate										
Nitrate	10/22/2014 11:10	10/23/2014 14:46	2	0.02	1.08		1.08		mg/L-N	
Method: EPA 353.2 Nitrite										
Nitrite	10/22/2014 11:10	10/23/2014 15:00	1	0.01	0.006	U	0.006	U	mg/L-N	
Method: EPA 9012B										
Cyanide	10/22/2014 11:10	10/28/2014 10:31	1	0.005	0.0005	J	0.005	U	mg/L	*
Method: SM 2320 B-2011										
Total Alkalinity	10/22/2014 11:10	10/27/2014 11:14	1	1	76.9		76.9		mg/L	
Method: SM 2540 C-2011										
Total Dissolved Solids(TDS)	10/22/2014 11:10	10/27/2014 14:22	1	10	9390		9390	J	mg/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **M114MW004** Sample Matrix : **Water**

Location ID: **NA**

Lab Sample ID: **21410220512** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: EPA 300.0										
Chloride	10/22/2014 10:25	10/26/2014 20:15	1000	200	4010		4010		mg/L	
Sulfate	10/22/2014 10:25	10/26/2014 20:15	1000	200	2080		2080		mg/L	
Method: EPA 353.2 Nitrate										
Nitrate	10/22/2014 10:25	10/23/2014 14:36	1	0.01	0.857		0.857		mg/L-N	
Method: EPA 353.2 Nitrite										
Nitrite	10/22/2014 10:25	10/23/2014 14:59	1	0.01	0.006	U	0.006	U	mg/L-N	
Method: EPA 9012B										
Cyanide	10/22/2014 10:25	10/28/2014 10:32	1	0.005	0.0007	J	0.005	U	mg/L	*
Method: SM 2320 B-2011										
Total Alkalinity	10/22/2014 10:25	10/27/2014 11:14	1	1	85.5		85.5		mg/L	
Method: SM 2540 C-2011										
Total Dissolved Solids(TDS)	10/22/2014 10:25	10/23/2014 16:22	1	10	8940		8940		mg/L	

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **M114MW001** Sample Matrix : **Water**

Location ID: **NA**

Lab Sample ID: **21410220514** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: EPA 300.0										
Chloride	10/22/2014 12:35	10/27/2014 23:00	2000	400	3100		3100		mg/L	
Sulfate	10/22/2014 12:35	10/27/2014 23:00	2000	400	1990		1990		mg/L	
Method: EPA 353.2 Nitrate										
Nitrate	10/22/2014 12:35	10/23/2014 14:48	2	0.02	1.26		1.26		mg/L-N	
Method: EPA 353.2 Nitrite										
Nitrite	10/22/2014 12:35	10/23/2014 15:02	1	0.01	0.006	U	0.006	U	mg/L-N	
Method: EPA 9012B										
Cyanide	10/22/2014 12:35	10/28/2014 10:33	1	0.005	0.0023	J	0.005	U	mg/L	*
Method: SM 2320 B-2011										
Total Alkalinity	10/22/2014 12:35	10/27/2014 11:14	1	1	96.2		96.2		mg/L	
Method: SM 2540 C-2011										
Total Dissolved Solids(TDS)	10/22/2014 12:35	10/27/2014 14:22	1	10	8190		8190	J	mg/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MWQ-24** Sample Matrix : **Water**

Location ID: **NA**

Lab Sample ID: **21410220515** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: EPA 300.0										
Chloride	10/23/2014 9:32	10/27/2014 2:25	5	1	5.39		5.39		mg/L	
Sulfate	10/23/2014 9:32	10/26/2014 12:55	50	10	51.7		51.7		mg/L	
Method: EPA 353.2 Nitrate										
Nitrate	10/23/2014 9:32	10/24/2014 13:29	10	0.1	3.76		3.76		mg/L-N	
Method: EPA 353.2 Nitrite										
Nitrite	10/23/2014 9:32	10/24/2014 13:45	1	0.01	0.006	U	0.006	U	mg/L-N	
Method: EPA 9012B										
Cyanide	10/23/2014 9:32	11/06/2014 9:55	1	0.005	0.0014	J	0.005	U	mg/L	*
Method: SM 2320 B-2011										
Total Alkalinity	10/23/2014 9:32	10/27/2014 8:04	1	1	212		212		mg/L	
Method: SM 2540 C-2011										
Total Dissolved Solids(TDS)	10/23/2014 9:32	10/27/2014 14:22	1	10	344		344	J	mg/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MA02MW001D** Sample Matrix : **Water**

Location ID: **NA**

Lab Sample ID: **21410220520** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units	
Method: EPA 300.0										
Chloride	10/23/2014 11:43	10/26/2014 15:33	1000	200	2290		2290		mg/L	
Sulfate	10/23/2014 11:43	10/26/2014 15:33	1000	200	2230		2230		mg/L	
Method: EPA 353.2 Nitrate										
Nitrate	10/23/2014 11:43	10/24/2014 13:33	5	0.05	3.56		3.56		mg/L-N	
Method: EPA 353.2 Nitrite										
Nitrite	10/23/2014 11:43	10/24/2014 13:49	1	0.01	0.006	U	0.006	U	mg/L-N	
Method: EPA 9012B										
Cyanide	10/23/2014 11:43	10/28/2014 12:15	1	0.005	0.0005	U	0.0005	U	mg/L	
Method: SM 2320 B-2011										
Total Alkalinity	10/23/2014 11:43	10/27/2014 11:14	1	1	145		145		mg/L	
Method: SM 2540 C-2011										
Total Dissolved Solids(TDS)	10/23/2014 11:43	10/27/2014 14:22	1	10	7040		7040	J	mg/L	*

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MA01MW002** Sample Matrix : **Water**

Location ID: **NA**

Lab Sample ID: **R1408409-001** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: EPA 218.6 LL									
Hexavalent Chromium - Dissolved	10/21/2014 10:40	11/04/2014 15:16	2	0.04	1.48		1.48		ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MA01MW001** Sample Matrix : **Water**

Location ID: **NA**

Lab Sample ID: **R1408409-002** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: EPA 218.6 LL									
Hexavalent Chromium - Dissolved	10/21/2014 12:20	11/04/2014 15:44	1	0.02	0.719		0.719		ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MA01MW004** Sample Matrix : **Water**

Location ID: **NA**

Lab Sample ID: **R1408409-003** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: EPA 218.6 LL									
Hexavalent Chromium - Dissolved	10/21/2014 11:00	11/04/2014 15:54	1	0.02	0.719		0.719		ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MA01MW004-a** Sample Matrix : **Water**

Location ID: **NA**

Lab Sample ID: **R1408409-004** Lab Code: **GCAL**

Sample Type: **Field Duplicate**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: EPA 218.6 LL									
Hexavalent Chromium - Dissolved	10/21/2014 11:00	11/04/2014 16:04	1	0.02	0.758		0.758		ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MA01MW003** Sample Matrix : **Water**

Location ID: **NA**

Lab Sample ID: **R1408409-005** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: EPA 218.6 LL									
Hexavalent Chromium - Dissolved	10/21/2014 12:26	11/04/2014 16:14	1	0.02	0.417		0.417		ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **M114MW002** Sample Matrix : **Water**

Location ID: **NA**

Lab Sample ID: **R1408409-006** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: EPA 218.6 LL									
Hexavalent Chromium - Dissolved	10/22/2014 9:35	11/06/2014 16:04	10	0.2	1.71		1.71		ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **M114MW003** Sample Matrix : **Water**

Location ID: **NA**

Lab Sample ID: **R1408409-007** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: EPA 218.6 LL									
Hexavalent Chromium - Dissolved	10/22/2014 11:10	11/06/2014 16:43	10	0.2	0.76		0.76		ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **M114MW004** Sample Matrix : **Water**

Location ID: **NA**

Lab Sample ID: **R1408409-008** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: EPA 218.6 LL									
Hexavalent Chromium - Dissolved	10/22/2014 10:25	11/06/2014 17:54	10	0.2	1.4		1.4		ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **M114MW001** Sample Matrix : **Water**

Location ID: **NA**

Lab Sample ID: **R1408409-009** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: EPA 218.6 LL									
Hexavalent Chromium - Dissolved	10/22/2014 12:35	11/06/2014 18:23	10	0.2	4.02		4.02		ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MWQ-24** Sample Matrix : **Water**

Location ID: **NA**

Lab Sample ID: **R1408409-010** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: EPA 218.6 LL									
Hexavalent Chromium - Dissolved	10/23/2014 9:32	11/04/2014 17:04	1	0.02	0.56		0.56		ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Form 1 Data Sheet - Conventionals

Melrose AFB

Melrose AFB Semi-Annual

SDG: 214102205

COC Sample ID: **MA02MW001D** Sample Matrix : **Water**

Location ID: **NA**

Lab Sample ID: **R1408409-011** Lab Code: **GCAL**

Sample Type: **Site Sample**

Parameter Name	Collection Date	Analysis Date	DF	RL	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
Method: EPA 218.6 LL									
Hexavalent Chromium - Dissolved	10/23/2014 11:43	11/04/2014 18:03	1	0.02	0.02	U	0.02	U	ug/L

DF = Dilution Factor RL = Reporting Limit

* = Modified by Validation

U = Non-Detect J = Estimated R = Rejected

eDATApro

Appendix II
Chain of Custody

Project Number: A012-109

TRINITY ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Chain of Custody Number (1): MAFR20141021001

Facility: Melrose Air Force Range

Project Name / Site Name: 2014 Semiannual

Client Name: Trinity (850) 613-6800

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart, Jonathan Kramer

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code(2)	Sample Number(3)	Sample Matrix(4)	Sample Analysis Requested(5): Number of containers	VOCs (8260B)	Explosives (8330)	Metals (Total & Diss) 6020A	Cyanide (9012A)	Mercury (7470A)	Nitrite, Nitrate (300.0)	Chloride, Sulfate (300.0)	Perchlorate (6860)	Alkalinity (2320B)	TDS (2540C)	Quality Assurance Samples(6): Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
MA01MW002		21OCT2014	1040		N		WG	10	X	X	X	X	X	X	X	X	X	X				A C
MA01MW007-c		21OCT2014	1040		TB		WQ	3	X													A C
MA01MW001		21OCT2014	1220		N		WG	10	X	X	X	X	X	X	X	X	X	X				A C
MA01MW004		21OCT2014	1100		N		WG	10	X	X	X	X	X	X	X	X	X	X				B C
MA01MW004-a		21OCT2014	1100		FD		WG	10	X	X	X	X	X	X	X	X	X	X				B C
MA01MW004-c		21OCT2014	1100		TB		WQ	3	X													B C
MA01MW003		21OCT2014	1226		N		WG	10	X	X	X	X	X	X	X	X	X	X				C C
MA01MW003-c		21OCT2014	1226		TB		WQ	3	X													C C

Client ID: 4747 - TRINITY Analysis & Development Corp.

SDG: 214102205

Due Date: 10/29/14

Comments: Diss metals field filtered 5980 93798958, 5980 93798947, 5980 93798936

Custody Transfers Prior to Receipt by Laboratory

	Relinquished by (Signed)	Date	Time	Received by (signed)	Date	Time
1.		10/21/14	1500			
2.	FedEx				10/22/14	0930
3.						

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: No

Method of Shipment: FedEx

Analytical Lab: GCAL

Lab Recipient:

Shipped: No.: 3

Airbill Number: 2.7, 3.2, 1.60 E24

Delivery Location: Baton Rouge, LA

Delivery Date/Time:

1.) Chain of Custody Number = site name (e.g., SS125) and then date (yyyymmdd) collected + custody number (e.g. SS125-20110902-01)...September 2, 2011.

2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/11 = 01, if sampled again on 10/10/11 = 02, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Ground Water , WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS= Suface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ= Soil Blanks

5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

6.) Quality assurance samples are assigned by date (ddmmyy) and the number of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or ambient blank collected on May 10, 2011 in association with samples on the COC will be designated 10051101 in the Blank Lot Control Number field).

7.) Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c

Page 1 of 1

Project Number: A012-109

Chain of Custody Number (1): MAFR20141022O1

TRINITY ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Facility: Melrose Air Force Range

Project Name / Site Name: 2014 Semiannual

Client Name: Trinity (850) 613-6800

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart, Jonathan Kramer

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code [2]	Sample Number [3]	Sample Matrix [4]	Sample Analysis Requested [5]: Number of containers	VOCs (8260B)	Explosives (8330)	Metals (Total & Diss) 6020A	Cyanide (9012A)	Mercury (7470A)	Nitrite, Nitrate (300.0)	Chloride, Sulfate (300.0)	Perchlorate (6860)	Alkalinity (2320B)	TDS (2540C)	Quality Assurance Samples [6]: Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
M114MW002		22OCT2014	0935		N	1	WG	10	X	X	X	X	X	X	X	X	X	X				A
M114MW002-c		22OCT2014	0935		TB	1	WQ	3	X													A
M114MW003		22OCT2014	1110		N	1	WG	10	X	X	X	X	X	X	X	X	X	X				A
M114MW004		22OCT2014	1035		N	1	WG	10	X	X	X	X	X	X	X	X	X	X				B
M114MW004-c		22OCT2014	1035		TB	1	WQ	3	X													B
M114MW001		22OCT2014	1235		N	1	WG	10	X	X	X	X	X	X	X	X	X	X				B

Client ID: 4747 - TRINITY Analysis & Development Corp.

SDG: 214102205

Due Date: 10/30/14

9
10
11
12

Comments

5980 9379 8991 5980 9379 9005 1.9 1.2 E24

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
SeaTex	10/23/14	1530	1.		
SeaTex	10/23/14	940	1. [signature]	10/23/14	940
			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: No — Shipped: No.: 2

Method of Shipment: FedEx — Airbill Number:

Analytical Lab: GCAL — Delivery Location: Baton Rouge, LA

Lab Recipient: — Delivery Date/Time:

1.) Chain of Custody Number = site name (e.g., SS125) and then date (yyyymmdd) collected + custody number (e.g. SS125-20110902-01)…September 2, 2011.

2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/11 = 01, if sampled again on 10/10/11 = 02, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Ground Water , WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS= Suface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ= Soil Blanks

5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

6.) Quality assurance samples are assigned by date (ddmmyy) and the number of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or ambient blank collected on May 10, 2011 in association with samples on the COC will be designated 10051101 in the Blank Lot Control Number field).

7.) Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c

Page 1 of 1

Project Number: A012-109

Chain of Custody Number (1): MAFR20141023001

TRINITY ANALYSIS & DEVELOPMENT CORP.
Environmental & Engineering Services

Chain of Custody and Analytical Request

Facility: Melrose Air Force Range

Project Name / Site Name: 2014 Semiannual

Client Name: Trinity (850) 613-6800

Project Manager: Jonathan Kramer

Collected by: Benjamin Stewart, Jonathan Kramer

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code [2]	Sample Number [3]	Sample Matrix [4]	Sample Analysis Requested [5]: Number of containers	VOCs (8260B)	Explosives (8330)	Metals (Total & Diss) 6020A	Cyanide (9012A)	Mercury (7470A)	Nitrite, Nitrate (300.0)	Chloride, Sulfate (300.0)	Perchlorate (6860)	Alkalinity (2320B)	TDS (2540C)	Quality Assurance Samples [6]: Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
MWQ-24		23 OCT 2014	0932		N	1	WG	10	X	X	X	X	X	X	X	X	X	X		15	QA	A
MWQ-24-MS		23 OCT 2014	0932		MS	1	WG	10	X	X	X	X	X	X	X	X	X	X		16 MS		A
MWQ-24-SD		23 OCT 2014	0932		SD	1	WG	10	X	X	X	X	X	X	X	X	X	X		MSD 17	18 DUP	B
MWQ-24-C		23 OCT 2014	0932		TB	1	WQ	3	X											19		A
MAG2MW001D		23 OCT 2014	1143		N	1	WG	10	X	X	X	X	X	X	X	X	X	X		20		B
MAG2MW001D-C		23 OCT 2014	1143		TB	1	WQ	3	X											21		B

Client ID: 4747 - TRINITY Analysis & Development Corp.

SDG: 214102205

Due Date: 10/30/14

Comments: Dissolved Metals were field filtered

2.4 E24

1.6 E24

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1.		10/23/14	1636			
2.	FedEx	10/24/14	9:35	Allison Kay	10/24/14	9:35
3.						

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:	No
Method of Shipment:	FedEx
Analytical Lab:	GCAL
Lab Recipient:	
Shipped: No.:	2
Airbill Number:	598093748970
Delivery Location:	Baton Rouge, LA
Delivery Date/Time:	

598093798969

1.) Chain of Custody Number = site name (e.g., SS125) and then date (yyyymmdd) collected + custody number (e.g. SS125-20110902-01)…September 2, 2011.

2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/11 = 01, if sampled again on 10/10/11 = 02, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Ground Water , WS = Surface Water SO = Soil, SE = Sediment, SL = Sludge, SS= Suface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ= Soil Blanks

5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

6.) Quality assurance samples are assigned by date (ddmmyy) and the number of the associated QC sample (01, 02, etc). (E.g., The first equipment blank, trip blank, or ambient blank collected on May 10, 2011 in association with samples on the COC will be designated 10051101 in the Blank Lot Control Number field).

7.) Trip Blanks shall correspond to the first well sampled with VOCs, for example: ST069-MW-08S-c