DEPARTMENT OF THE AIR FORCE
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HOLLOMAN AIR FORCE BASE, NEW MEXICO

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APR 23 2014
Hazardous Waste Bureau
APR 21 2014

Adam Kusmak
Chief, Installation Management
550 Tabosa Avenue
Holloman AFB NM 88330-8458

New Mexico Environment Department
Attn: Mr. John Kieling, Chief
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe NM 87505-6303

Dear Mr. Kieling

Holloman Air Force Base is pleased to submit the Final SD-08 (SWMU-82) Long Term Monitoring Report, Quarter 8, Fall 2013 for your review.

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

If you have any questions, please contact me (575) 572-3931 or by email at adam.kusmak@holloman.af.mil.

Sincerely

ADAM M. KUSMAK, GS-13, DAF

1 Attachment:
Revised Final SD-08 (SWMU-82) Long Term Monitoring Report, Quarter 8, Fall 2013

cc:

(w/Atch)	(w/o Atch)	(w/CD)
Mr. David Strasser	Mr. Will Moats	Mr. Chuck Hendrickson
Hazardous Waste Bureau	Hazardous Waste Bureau	USEPA, Region 6 (6PD-F)
5500 San Antonio Dr, NE	5500 San Antonio Dr, NE	1445 Ross Ave, Ste 1200
Albuquerque NM 87109-4127	Albuquerque NM 87109-4127	Dallas TX 75202-2750

FINAL
SD-08 (SOLID WASTE MANAGEMENT UNIT - 82)
LONG TERM MONITORING REPORT
QUARTER 8, FALL 2013
HOLLOMAN AFB, NEW MEXICO

Prepared For:

49 CES/CEAN
Holloman Air Force Base
New Mexico

Under Contract To:

U.S. Army Corps of Engineers
Omaha District
Omaha, Nebraska

Contract No. W9128F-09-D-0055
Delivery Order 003
Project Number 10-0004

February 2014

NATIONVIEW

Holloman Air Force Base

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SD-08 (SOLID WASTE MANAGEMENT UNIT – 82)
LONG TERM MONITORING REPORT
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Prepared By

1608 13th Avenue South, Suite 160
Birmingham, Alabama 35205
NationView Project No. 10-0004

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FINAL
SD-08 (SOLID WASTE MANAGEMETN UNIT – 82)
LONG TERM MONITORING REPORT
QUARTER 8, FALL 2013
HOLLOMAN AIR FORCE BASE, NEW MEXICO

TABLE OF CONTENTS

ACRONYMS iii
1 Introduction 1-1
1.1 Report Organization 1-1
2 Site Background 2-1
2.1 SD-08 Site Description 2-1
2.2 Previous Investigations 2-1
2.3 Upgradient Site AOC-RR Groundwater Impacts at Site SD-08 2-3
3 Applicable Screening Criteria 3-1
3.1 Groundwater Screening Criteria 3-1
4 Fall 2013 Field Activities 4-1
4.1 Groundwater Sampling 4-1
4.2 Laboratory Analysis and Data Validation 4-2
4.2.1 VOCs 4-2
4.2.2 TAL Metals 4-3
4.2.3 Nitrate 4-3
4.2.4 TDS 4-3
4.3 Surveying and Groundwater Elevations 4-3
4.4 Equipment Decontamination 4-3
4.5 Investigative Derived Waste Handling 4-3
4.6 Documentation 4-4
5 Fall 2013 Analytical Results 5-1
5.1 Groundwater Analytical Results 5-1
5.1.1 Volatile Organic Compounds 5-1
5.1.2 Target Analyte List Metals 5-2
5.1.2 Nitrate 5-3
5.1.3 Total Dissolved Solids 5-3

6 Comparison of November 2013 Groundwater Sampling Results to Previous SD-08 LTM Results 6-1
6.1 Volatile Organic Compounds 6-1
6.2 Metals 6-3
7 Conclusions and Recommendations 7-1
8 References 8-1

Figures

Figure 2-1 Holloman Air Force Base, New Mexico, Location Map
Figure 2-2 SD-08 Site Location Map
Figure 2-3 SD-08 Site Plan
Figure 4-1 SD-08 Monitoring Well Locations Map
Figure 4-2 SD-08 Potentiometric Map (Fall 2013)
Figure 5-1 SD-08 Groundwater Analytical Results Above Action Levels (Fall 2013)
Figure 5-2 SD-08 1,2-Dichloroethane Isocontour Map (Fall 2013)
Figure 5-3 SD-08 Proposed Monitoring Wells
Figure 6-1 1,2-Dichloroethane Concentration Trends in SD-08 Monitoring Wells

Tables

Table 4-1 Groundwater Elevation Summary (Fall 2013)
Table 5-1 Groundwater Analytical Data (Fall 2013)
Table 6-1 Summary of Selected SD-08 Groundwater Analytical Results Above Action Levels (January 2012 – November 2013)

Attachments

- Attachment 1 – New Mexico Environmental Department, Notice of Approval, Request to Perform Eight Quarters of Groundwater Monitoring, Site SD-08 (SWMU 82) HAFB, EPA ID# NM6572124422, HWB-HAFB-07-007, November 22, 2011

Appendices

- Appendix A – Portions of the *Draft Final Site Investigation Report Waste Sites SS-06, SD-15, AOC-RR, and AOC-BBMS Holloman Air Force Base, New Mexico* (Ebasco Services Inc. and Groundwater Technology Government Services Inc. [GTI], October 1995)
- Appendix B - Depth to Water Field Form
- Appendix C - Groundwater Sampling Field Forms
- Appendix D - Laboratory Analytical Results (Provided on Enclosed CD)
- Appendix E - Data Validation Report
- Appendix F - Daily Quality Control Reports

ACRONYMS

amsl	above mean sea level
AOC	Area of Concern
bgs	below ground surface
Bhate	Bhate Environmental Associates Inc.
COC	Contaminants of Concern
COPC	Contaminants of Potential Concern
1,2-DCBZ	1,2 dichlorobenzene
1,2-DCA	1,2 dichlorethane
1,2-DCP	1,2 dichloropropane
°C	Degrees Celsius
DQCR	Daily Quality Control Reports
EBASCO	Electric Bond and Share Company
ERP	Environmental Restoration Program
ft	Feet or foot
ft^2	Square feet
FS/CMS	Feasibility Study/Corrective Measures Study
GCAL	Gulf Coast Analytical Laboratories
GPS	Global Positioning System
GTI	Groundwater Technology Government Services Inc.
HAFB	Holloman Air Force Base
IDW	Investigative Derived Waste
IRP	Installation Restoration Program
J	Laboratory Qualifier denoting an estimated result
LTM	Long Term Monitoring
MCL	Maximum Contaminant Level
MDL	Method Detection Limit
µg/L	Micrograms per liter
mg/L	Milligrams per liter
NAVD	North American Vertical Datum
NationView	Nation View, LLC
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NMWQCC	New Mexico Water Quality Control Commission
O/WS	Oil Water Separator
%D	percent difference
PRG	Preliminary Remediation Goal
QA	Quality Assurance
QAPP	Quality Assurance Project Plan
QC	Quality Control
RBC	Risk Based Concentration
RCRA	Resource Recovery and Conservation Act
RFI	RCRA Facility Investigation

RI	Remedial Investigation
RPD	Relative Percent Difference
RSL	Regional Screening Level
SOP	Standard Operating Procedure
SOW	Scope of Work
SWMU	Solid Waste Management Unit
TAL	Target Analyte List
TDS	Total Dissolved Solids
TPH	Total Petroleum Hydrocarbons
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USCS	Unified Soil Classification System
UST	Underground Storage Tank
UTM	Universal Transverse Mercator
VOC	Volatile Organic Compound
WGS	World Geodetic System
WWTP	Wastewater Treatment Plant

1 INTRODUCTION

This Long Term Monitoring (LTM) Quarterly Report documents the eighth quarterly (Fall 2013) groundwater sampling field event at Environmental Restoration Program (ERP) Site SD-08 (Solid Waste Management Unit [SWMU] 82 – Building 131 Washrack) at Holloman Air Force Base (HAFB), New Mexico. NationView LLC (NationView) conducted this sampling event under contract W9128F-09-D-0055, Task Order No. 0003 for the United States Army Corps of Engineers (USACE), Omaha District.

The primary objectives of the SD-08 LTM quarterly groundwater sampling events are based on recommendations provided by the USACE Omaha Statement of Work (SOW) dated March 2, 2010 (USACE, 2010). The LTM objectives are based on the findings presented in the *Final RCRA Facility Investigation Report, Building 131 Washrack, Site SD-08, Holloman AFB, New Mexico* (Bhate Environmental Associates, Inc. [Bhate], 2007). Additionally, on November 22, 2011, the New Mexico Environment Department (NMED) approved HAFB's request to perform two years of quarterly groundwater monitoring at Site SD-08 (NMED, 2011a). The NMED Notice of Approval letter, *Request to Perform Eight Quarters of Groundwater Monitoring, Site SD-08* (NMED, 2011a) is provided as Attachment 1. Specifically, the project objectives are to conduct a quarterly monitoring program for two years in order to determine if natural attenuation is degrading the primary contaminants of concern (COCs) (1,2-dichloroethane [1,2-DCA], 1,2 dichloropropane [1,2-DCP], manganese, and arsenic) previously identified in monitoring wells MW-08-01, MW-08-03, and MW-08-07 during the 2006 Resource Conservation Recovery Act (RCRA) Facility Investigation (RFI) groundwater sampling event.

1.1 Report Organization

This Quarterly Report is organized into the following eight sections:

- Section 1 – Introduction
- Section 2 – Site Background
- Section 3 – Applicable Screening Criteria
- Section 4 – Fall 2013 Field Activities
- Section 5 – Fall 2013 Analytical Results
- Section 6 – Comparison of the November 2013 Groundwater Analytical Results to Previous SD-08 LTM Results
- Section 7 – Conclusions and Recommendations
- Section 8 – References

The figures, tables, attachments and appendices referenced throughout this Quarterly Report are included following the text (after Section 8).

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2 SITE BACKGROUND

2.1 SD-08 Site Description

HAFB is located in south central New Mexico, in the northwest central portion of Otero County, approximately 75 miles north-northeast of El Paso, Texas (Figure 2-1). Site SD-08 is located in the northeastern portion of the main base area (Figure 2-2). The original SD-08 Site occupied approximately one-half acre and was surrounded by a chain-link fence. Within the fenced area were Building 131, a steam cleaner washrack with associated drains, and an oil water separator. The area was unpaved with sparse vegetation along the fence. Site topography was, and remains, generally flat. The washrack was installed in 1942 and consisted of a rectangular concrete pad (approximately 1,000 square feet [ft^2]). Refuse collection trucks (trash trucks) were routinely washed with soap and water at the washrack. Base records indicate that pesticides were routinely sprayed inside the trucks during the 1970s for fly control; however, this practice ceased in 1982. Drains located at the north end of the washrack connected to a sewer line which carried wastewater to an oil/water separator (O/WS) near the northwest corner of the washrack. According to site personnel, it was common for the sewer line to clog, causing the sump and O/WS to overflow onto surrounding soil. The washrack pad contained cracks in the concrete and was replaced in 1992 with a new washrack in the same location (Foster Wheeler/Radian, 1995). In 1995 the entire yard area was covered with an asphalt cap as part of the remedial measures performed onsite.

Since 1991 Site SD-08 has been the subject of a series of environmental investigations and one remedial action related to pesticide contamination detected in soil and groundwater. The end result of the remedial action was installation of an asphalt cap that covers approximately 41,000 ft^2, and a chain link fence surrounding the site to restrict access.

As shown on Figure 2-3, Site SD-08 consists of an asphalt cap, chain link fence, concrete washrack, oil water separator and eight groundwater monitoring wells (MW-08-01 through MW-08-08). Site SD-08 is listed as the Building 131 Washrack (SMWU 82) in Appendix 4-A (Table A) of the HAFB Hazardous Waste Facility Permit No. NM6572124422 (NMED, 2005).

2.2 Previous Investigations

Site SD-08 was identified as a potential contaminant source during the Installation Restoration Program (IRP) Phase I Records Search (CH2M Hill, 1983). As a result, the site was investigated under Phase I of the IRP as Site SD-08 in 1991. The ensuing *Remedial Investigation Report, Investigation, Study and Recommendation for 29 Waste Sites* (Radian, 1992) indicated that pesticide contamination was present in both shallow soil and groundwater onsite. The associated risk evaluation concluded that pesticide concentrations in soil posed an occupational health risk. To mitigate this risk, the site entered into the Feasibility Study/Corrective Measures Study (FS/CMS) process, which established health based cleanup criteria, identified the area exceeding these cleanup

criteria, and recommended the installation of an impermeable cap. The Phase II RFI (Foster Wheeler/Radian, 1995) delineated the extent of organochlorine pesticide contamination in groundwater. During the 29 Waste Sites Remedial Investigation (RI) and Phase II RFI, metals and pesticides were identified in soil samples; further, metals, volatile organic compounds (VOCs) and pesticides were detected in groundwater samples. The primary contaminants attributed to site activities at SD-08 were pesticides. Subsequently, the source of detected VOCs was identified as the former tank area at Area of Concern (AOC)-RR (Radian, 1993). In 1996, Site SD-08 was recommended for long-term groundwater monitoring to ensure that the remedial action was preventing further degradation of groundwater. In 2006, an RFI was conducted to review available information and to collect soil and groundwater data in order to fulfill data gap requirements identified by the NMED (Bhate, 2007). The RFI included a risk based evaluation that was established by using identified target levels and site specific representative COC concentrations. The RFI concluded that residual soil and groundwater concentrations were protective of future onsite receptors and recommend a no further action status for the SD-08 Site (Bhate, 2007).

A complete summary of historical site specific investigations is provided within Section 2.3 of the *Final RCRA Facility Investigation Report, Building 131 Washrack, Site SD-08, Holloman Air Force Base, New Mexico* (Bhate, 2007). Additionally, source characterization and LTM results for Site SD-08 are described in the following documents:

- *Remedial Investigation (RI) Report, Investigation, Study and Recommendation for 29 Waste Sites, Holloman Air Force Base, New Mexico, Volume I,* Radian, June 1992.
- *Draft Final Feasibility Study, Investigation, Study and Recommendation for 29 Waste Sites, Holloman Air Force Base, New Mexico,* Radian, December 1993.
- *Draft Final Phase II RCRA Facility Investigation Report, Table 1 Solid Waste Management Units*, *Holloman Air Force Base, New Mexico,* Foster Wheeler/Radian, June 1995.
- *Final Long-Term Groundwater Monitoring Report, Holloman Air Force Base, New Mexico,* Bhate, May 2006.
- *Final SD-08 Long Term Groundwater Monitoring Report Quarter 1, Winter 2012, Holloman AFB, New Mexico,* NationView, March 2012.
- *Final SD-08 Long Term Groundwater Monitoring Report Quarter 2, Spring 2012, Holloman AFB, New Mexico,* NationView, June 2012.
- *Final SD-08 Long Term Groundwater Monitoring Report Quarter 3, Summer 2012, Holloman AFB, New Mexico, NationView, September 2012.*
- *Final SD-08 Long Term Groundwater Monitoring Report Quarter 4, Fall 2012, Holloman AFB, New Mexico, NationView, December 2012.*

- *Final SD-08 Long Term Groundwater Monitoring Report Quarter 5, Winter 2013, Holloman AFB, New Mexico, NationView, March 2013.*
- *Final SD-08 Long Term Groundwater Monitoring Report Quarter 6, Spring 2013, Holloman AFB, New Mexico, NationView, May 2013.*
- *Revised Final SD-08 Long Term Groundwater Monitoring Report Quarter 7, Summer 2013, Holloman AFB, New Mexico, NationView, January 2014.*

2.3 Upgradient Site AOC-RR Groundwater Impacts at Site SD-08

As a result of the findings presented in the SD-08 Remedial Investigation Report (Radian, 1992), a Site Investigation was conducted at AOC-RR by Electric Bond and Share Company (EBASCO) Services, Inc. in 1995 (EBASCO/Groundwater Technology Government Services Inc. [GTI], 1995). AOC-RR (Building 80) was historically used to repair railroad locomotives and included a former underground storage area (three tanks, unknown volumes). The last known product the tanks contained was a petroleum based dust suppressant used for roads. As shown on Figure 2-3 the two areas which comprise AOC-RR (Building 80 and the underground storage tank area) are located approximately 120 feet (ft) west and upgradient of SD-08. The AOC-RR Site Investigation included groundwater and soil sampling at SD-08. VOCs or total petroleum hydrocarbons (TPH) were not detected in any of the 13 soil samples collected at AOC-RR during the 1995 Site Investigation (Table 3-3, Appendix A). However, the groundwater data indicated that both sites (SD-08 and AOC-RR) had been impacted by VOCs (petroleum constituents). Specifically, elevated concentrations of ethylbenzene (1,000 micrograms per liter [µg/L]), benzene (870 µg/L), 1,2-DCA (440 µg/L), toluene (90 µg/L), and xylenes (560 µg/L) were detected in the groundwater sample collected from GP-06 (Table 3-4, and Figure 3-4 Appendix A) which is located approximately 120-ft hydraulically up gradient from the SD-08 Site. Additionally, as shown on Figure 3-4 (Appendix A) several other groundwater samples (GP-01, GP-04, GP-05, GP-07, GP-09, GP-11 and GP-13) collected in the vicinity of AOC-RR contained elevated concentrations of VOCs (1,2-DCA, 1-2-DCP, benzene, toluene and ethylbenzene) above current action levels. Historically, 1,2-DCA and 1-2-DCP were commonly used as lead scavengers in antiknock gasoline.

Because VOCs have not been detected in the soil samples collected at either site during previous investigations, the source of VOCs (1,2-DCA and 1,2-DCP) identified in groundwater at SD-08 is still unknown; however, based on the elevated concentrations of VOCs detected in eight of the AOC-RR groundwater samples collected in 1995, AOC-RR is the probable source of elevated VOC contamination (1,2-DCA and 1,2-DCP) identified in several SD-08 monitoring wells (EBASCO/GTI, 1995).

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3 APPLICABLE SCREENING CRITERIA

The analytical data collected during the eighth quarterly (Fall 2013) sampling event has been evaluated against all of the applicable regulatory screening criteria that are specified in Appendix 4-F *Action Levels and Cleanup Levels* of the HAFB Hazardous Waste Permit No: NM6572124422 (NMED, 2004). Groundwater data evaluation consists of a direct comparison to the applicable action level screening criteria.

The maximum detected concentration of each contaminant which is detected above the method detection limit (MDL) has been used for comparison. The following sections present regulatory screening criteria used to evaluate the analytical data for the SD-08 eighth quarter sampling event conducted in November 2013.

3.1 Groundwater Screening Criteria

As per Appendix 4-F (NMED, 2004), there are two applicable standards for groundwater, the New Mexico Water Quality Control Commission (NMWQCC) groundwater cleanup levels for contaminants (New Mexico Administrative Code [NMAC] 20.6.2.3103) and the USEPA National Primary Drinking Water Regulations Maximum Contaminant Levels (MCLs) (USEPA, 2009). The lower of the two standards has been used as action levels for VOCs, and nitrate. Filtered (dissolved) TAL metals and unfiltered (total) mercury will be compared to the USEPA MCLs (USEPA, 2009) and the NMWQCC groundwater standards (NMAC 20.6.2.3103). TAL metals are also compared to the NMED Approved Background Levels for filtered (dissolved) Constituents in Groundwater (Table 3, NMED 2011b) and unfiltered (total) mercury are compared to the NMED Approved Background Levels for Unfiltered (Dissolved) Constituents in Groundwater (Table 2, NMED 2011b).

There are two applicable standards for total dissolved solids (TDS); the NMWQCC groundwater standards (NMAC 20.6.2.3103) and the USEPA's *National Primary Drinking Water Regulations* Secondary MCLs (USEPA, 2009). The lower of the two standards is used as the action level for TDS.

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4 FALL 2013 FIELD ACTIVITIES

The primary objective of the SD-08 LTM program is to collect additional groundwater data to determine if natural attenuation of previously identified COCs (i.e., 1,2-DCA and 1,2-DCP) identified during the RFI (Bhate, 2007) is occurring. This objective is being accomplished by sampling monitoring wells; MW-08-01, MW-08-02, MW-08-03, MW-08-04, MW-08-05, MW-08-06, MW-08-07, MW-08-08, SWMU183-MW03, S10-MW01 and S10-MW06 on a quarterly basis for two years (January 2012 through October 2014). An additional cross-gradient monitoring well (S10-MW02) was added to the SD08 LTM network and sampled in quarters 6 and 7. In response to correspondence from the NMED dated October 5, 2012 (NMED, 2012b), four new monitoring wells (SD08-MW10, SD08-MW11, SD08-MW12, SD08-MW13) were added to the SD08 LTM network and sampled in quarter 7. The additional wells are intended to delineate the upgradient and downgradient extents of the groundwater contamination found at SD-08.

Therefore, in order to accomplish the objectives of the SD-08 LTM program the following field activities were performed by NationView in November 2013:

- One round of groundwater level measurements was collected from the 16 existing monitoring wells within the SD-08 LTM network (MW-08-01, MW-08-02, MW-08-03, MW-08-04, MW-08-05, MW-08-06, MW-08-07, MW-08-08, SD08-MW10, SD08-MW11, SD08-MW12, SD08-MW13, SWMU183-MW03, S10-MW01, S10-MW02 and S10-MW06).
- One round of groundwater samples were collected from the SD-08 LTM network (MW-08-01, MW-08-02, MW-08-03, MW-08-04, MW-08-05, MW-08-06, MW-08-07, MW-08-08, SD08-MW10, SD08-MW11, SD08-MW12, SD08-MW13, SWMU183-MW03, S10-MW01, S10-MW02 and S10-MW06).
- Groundwater samples were analyzed by an offsite laboratory for VOCs by USEPA method 8260B, TAL Metals (dissolved and total mercury) by USEPA Methods 6010C/7470A, Nitrate by USEPA Method 300.0, and TDS by USEPA Method 2540C.

4.1 Groundwater Sampling

Groundwater samples were collected November 4 - 7, 2013 from the sixteen monitoring wells (MW-08-01 through MW-08-08, SWMU183-MW03, SD08-MW10, SD08-MW11, SD08-MW12, SD08-MW13, S10-MW01, S10-MW02, and S10-MW06) illustrated on Figure 4-1. Prior to sampling, groundwater levels were collected for each monitoring well; Appendix B provides a complete field log of depth to water measurements. Monitoring well purging and sampling was completed with low flow techniques utilizing a peristaltic pump, disposable polyethylene tubing placed at mid-screen, and a groundwater multi-parameter meter equipped with a flow-thru cell. Field parameters were recorded for every well volume of groundwater removed. Field parameters were considered stable when the pH measurements remained constant within 0.1 units; specific conductivity, dissolved oxygen and temperature varied by no more than 10

percent, and turbidity by no more than 5 nephelometric units. Upon reaching stable purging parameters, VOC samples were collected using disposable Teflon bailers followed by collecting the remaining samples using a peristaltic pump at low flow rates. Samples collected for dissolved TAL metals were also field filtered with a 0.45 micron filter. Each of the wells was pumped at an average rate of less than 1 liter per minute. Monitoring Well Sample Collection Forms are included as Appendix C.

4.2 Laboratory Analysis and Data Validation

The analysis of groundwater samples collected during the eighth quarterly sampling event (Fall 2013) followed the methodologies presented in the NMED approved *Additional Investigation Requirements Work Plan ERP Site SD-08 (SWMU 82 – Building 131 Washrack), Holloman Air Force Base, New Mexico* (Bhate, 2005). All analytical procedures followed the USEPA SW-846 protocol with groundwater samples from each well being analyzed for the following:

- VOCs by USEPA Method 8260B (groundwater)
- TAL Metals by USEPA 6010C (groundwater-dissolved)
- Total Mercury by USEPA 7470A (groundwater)
- Nitrate by USEPA Method 300 (groundwater)
- TDS by Method 2540C (groundwater)

All of the laboratory data generated during this quarterly event was validated by the project chemist. Field Quality Assurance (QA)/Quality Control (QC) samples, including trip blanks, matrix spikes, and matrix spike duplicates were collected to document field and laboratory QA/QC. Analytical data packages are provided in Appendix D and the Data Validation Report is included as Appendix E. Gulf Coast Analytical Laboratories (GCAL) in Baton Rouge, Louisiana performed the analysis of all groundwater samples collected.

Overall, only minor QC issues were identified during the data validation of the laboratory results and the laboratory took all necessary corrective actions. All of the data were determined to be usable with only minor qualifications. Information regarding the precision, accuracy, representativeness, and completeness is provided in the Data Validation Reports (Appendix E) with the following paragraphs providing a synopsis of each analyte group.

4.2.1 VOCs

The relative percent difference (RPD) between sample MW-08-01 and its field duplicate was outside control limits for 1,2-dichloroethane, benzene and ethylbenzene. These compounds were qualified as estimated, “J”. The RPD between sample SD08-MW13 and its field duplicate was not outside control limits for any VOCs.

4.2.2 TAL Metals

Arsenic and silver collected from MW-08-02 and MW-08-03 were qualified as estimated "J".

4.2.3Nitrate

Nitrate collected from SD08-MW12, SD08-MW13, SD08-MW13A, S10-MW6, and SWMU183-MW03 was qualified as estimated "J".

4.2.4 TDS

No qualification was required of the TDS data.

4.3 Surveying and Groundwater Elevations

Monitoring wells used for the potentiometric surface map were surveyed by a qualified surveyor using a Trimble® Geometrics Pro XR GPS in accordance with methods described in the *Basewide Quality Assurance Project Plan* (QAPP) (Bhate, 2003). The horizontal locations (northing and easting coordinates) are relative to the World Geodetic System (WGS) 1984 Universal Transverse Mercator (UTM) Coordinate System, Zone 13 North (meters) and surveyed to an accuracy of +/- 0.33 meters Vertical elevations were referenced to the North American Vertical Datum (NAVD) 1988 and surveyed to an accuracy of +/-0.001 ft. The top of casing for the monitoring wells (vertical control) was used to determine the depth and elevation of the groundwater. The northing and easting and top of casing survey data for the SD-08 Quarter 8 sampling event are included in Table 4-1.

To determine the groundwater flow direction at Site SD-08, groundwater elevations were measured at 17 monitoring wells (MW-08-01 through MW-08-08, MW-09-01, SD08-MW10, SD08-MW11, SD08-MW12, SD08-MW13, S10-MW01, S10-MW02, S10-MW06 and SWMU183-MW03) on November 4, 2013. Static water elevations measured from the top of casing ranged from 4076.177 ft above mean sea level (amsl) at monitoring well MW-09-01 to 4073.021 ft amsl at SD08-MW13. Table 4-1 presents the groundwater elevation data collected during this sampling event. A potentiometric surface map of SD-08 was developed using the data collected on November 4, 2013 (Figure 4-2). The groundwater flow direction at SD-08 is primarily to the east-southeast.

4.4 Equipment Decontamination

All reusable groundwater sampling equipment (water level meter and water quality meter) were decontaminated in accordance with HAFB SOP-2 provided in the Basewide QAPP (Bhate, 2003).

4.5 Investigative Derived Waste Handling

Investigative derived waste (IDW) consisting of disposable items such as nitrile gloves and polyethylene tubing, were disposed of in Holloman Air Force Base waste bins, in accordance with HAFB SOP-9 of the Basewide QAPP (Bhate, 2003).

Decontamination and purge waters from groundwater sampling were locally contained in 55 gallon steel drums and conveyed to an 18,000 gallon storage (weir) tank located at Site SS-61. The 18,000 gallon storage tank is maintained by NationView, pending laboratory analysis, until disposal through the HAFB Wastewater Treatment Plant (WWTP) is permitted.

4.6 Documentation

All field documentation, sample designation and labeling, and chain of custody procedures were conducted in accordance with the procedures specified in the NMED approved *Additional Investigation Requirements Work Plan ERP Site SD-08 (SWMU 82 – Building 131 Washrack), Holloman Air Force Base, New Mexico* (Bhate, 2005). Copies of the Daily Quality Control Reports (DQCRs) are included in Appendix F.

5 FALL 2013 ANALYTICAL RESULTS

During the Quarter 8 LTM event, groundwater samples were collected from MW-08-01 through MW-08-08, SD08-MW10 through SD08-MW-13, SWMU183-MW03, S10-MW01, S10-MW02, and S10-MW06 on November 4 – 7, 2013. Groundwater samples were submitted to GCAL for VOC, TAL metals (dissolved), mercury (total), nitrate, and TDS analysis. A summary of the groundwater analytical results displaying detections only is provided as Table 5-1. Complete laboratory analytical packages (including chain of custody) and data validation reports, are provided in Appendix D and Appendix E, respectively. Figure 5-1 presents NMWQCC and USEPA MCL groundwater exceedences from this sampling event.

5.1 Groundwater Analytical Results

In November 2013, 18 groundwater samples (including two duplicates) were collected from 16 monitoring wells during the Fall 2013 LTM event. Groundwater samples were analyzed for VOCs, dissolved TAL metals, total mercury, nitrate, and TDS. Analytical results for these groundwater samples are summarized in Table 5-1. Figure 5-1 presents NMWQCC and USEPA MCL groundwater exceedences from this sampling event.

5.1.1 Volatile Organic Compounds

Ten VOCs (1,2-DCBZ, 1,2-DCA, 1-2-DCP, acetone, benzene, ethylbenzene, isopropylbenzene, n-propylbenzene, sec-butylbenzene, and tert-butylbenzene) were detected above the MDL in groundwater samples collected during this sampling event. 1,2-DCA, 1,2-DCP, and benzene were the only VOCs detected above the USEPA MCLs and NMWQCC standards. 1,2-DCA was detected with concentrations that exceed the USEPA MCL (5 µg/L) in monitoring wells MW-08-01 (26.1 µg/L), MW-08-07 (30.5 µg/L), SD08-MW11 (77.3 µg/L), and S10-MW01 (22.0 µg/L). 1,2-DCA was also detected in monitoring well MW-08-02 (4.02 J µg/L), below the USEPA MCL. Figure 5-2 illustrates the isocontours of 1,2-DCA concentrations detected above the MCL which is currently present in groundwater across Site SD-08. 1,2-DCP was detected in three monitoring wells (MW-08-01, MW-08-07, and SD08-MW11) and exceeded the USEPA MCL (5 µg/L) in wells MW-08-01 (5.25 µg/L). Benzene was detected in five monitoring wells (MW-08-01, MW-08-08, SD08-MW10, SD08-MW11, and SWMU183-MW03) and exceeded the USEPA MCL (5 µg/L) in well SD08-MW10 (62.9 µg/L).

Seven additional VOCs were detected at concentrations below applicable groundwater action levels. 1,2,-DCBZ was detected in MW-08-01 at 0.257 J µg/L, below the USEPA MCL (600 µg/L). Maximum concentrations of acetone (5.74 µg/L), isopropylbenzene (0.785 J µg/L), and tert-butylbenzene (0.832 J µg/L) were also detected in MW-08-01, while a maximum concentration of ethylbenzene (1.94 J µg/L), n-propylbenzene (30.6 µg/L), and sec-butylbenzene, (2.83 J µg/L) was detected in SD08-MW10 during Quarter 8. Chloroform was not detected during Quarter 8. It should be noted that the NMWQCC and USEPA have not established standards for acetone, isopropylbenzene, n-propylbenzene, sec-butylbenzene, and tert-butylbenzene.

5.1.2 Target Analyte List Metals

Target analyte list metals were analyzed via method 6010C/7470A for dissolved and total (mercury only) matrices.

Seventeen dissolved (filtered) TAL metals were detected above the MDL in the 18 samples collected (including two duplicates) from monitoring wells MW-08-01 through MW-08-08, SD08-MW10 through SD08-MW13, S10-MW01, S10-MW02, S10-MW06, and SWMU183-MW03. Three of the TAL metals (arsenic, iron, and manganese) were detected above their respective USEPA MCLs, Secondary MCLs, NMWQCC groundwater standards and/or NMED approved background levels (Table 5-1). In addition two dissolved metals (copper and vanadium) were detected above their respective NMED approved background levels (Table 3, NMED 2011b) but at concentrations that do not exceed established action levels.

The following subsections provide a summary of results for the three dissolved TAL metals which were detected above their applicable actions levels and NMED approved background levels. Figure 5-1 presents the distribution of dissolved TAL metals detected in groundwater which exceeded applicable USEPA MCLs, USEPA Secondary MCLs, and/or NMWQCC groundwater standards at SD-08.

Arsenic

Arsenic was detected in the groundwater samples collected from six of the sixteen monitoring wells above the USEPA MCL (10 µg/L) and the NMED approved background level (10 µg/L) at concentrations ranging from 13 J µg/L (S10-MW02) to 72 µg/L (MW-08-06). The exceedences of arsenic most likely represent the natural variability of groundwater geochemistry at SD-08 as arsenic was detected site-wide, both within and outside the boundary of 1,2-DCA contaminated groundwater plume.

Iron

Iron was detected in the groundwater samples collected from four monitoring wells above the USEPA Secondary MCL (300 µg/L) at concentrations of 1,150 µg/L (MW-08-02), 1,270 µg/L (SD08-MW10), 1,310 µg/L (MW-08-05), and 8,100 µg/L (MW-08-01). The iron concentrations were detected above the NMWQCC standard of 1,000 µg/L and the NMED approved background level (65.6 µg/L) in all four wells. Monitoring wells MW-08-01 and MW-08-02 also had VOC detections and are within the area of 1,2-DCA groundwater contamination (Figure 5-2).

Manganese

Manganese was detected in groundwater samples collected from eleven monitoring wells above the USEPA Secondary MCL and the NMED approved background level (50 µg/L) with concentrations ranging from 66 J µg/L (SD08-MW12) to 2,590 µg/L (MW-08-01). Manganese detections at five of these locations also exceed the NMWQCC standard of 200 µg/L. Furthermore, the maximum detection of manganese (2,590 µg/L) was detected in monitoring well MW-08-01 which is located within the boundaries of the 1,2-DCA plume (Figure 5-2). However, the exceedences of manganese most likely

represent the natural variability of groundwater geochemistry at SD-08 as manganese was detected above the USEPA Secondary MCL in monitoring wells SWMU183-MW03 and S10-MW06 which are located outside the 1,2-DCA contaminated groundwater plume.

5.1.2 Nitrate

Nitrate was detected in eleven monitoring wells at concentrations ranging from 1.49 milligrams per liter (mg/L) (MW-08-07) to 43.2 mg/L (S10-MW06). Nitrate concentrations exceeded the USEPA MCL (10 mg/L) in MW-08-03, MW-08-06, MW-08-08, SD08-MW12, SD08-MW13, S10-MW02, S10-MW06, and SWMU183-MW03. Therefore, these concentrations of nitrate most likely represent the natural variability of groundwater geochemistry as nitrate was detected inside and outside of the groundwater contamination plume including in the most upgradient monitoring well MW-08-08.

5.1.3 Total Dissolved Solids

Total dissolved solids concentrations ranged from 2,210 mg/L (SD08-MW10) to 59,200 mg/L (SD08-MW12) in the groundwater samples collected during the eighth quarterly sampling event. TDS concentrations in all wells exceed both the NMWQCC groundwater standard (1,000 mg/L) and USEPA Secondary MCL (500 mg/L). TDS concentrations below 10,000 mg/L at Site SD-08 are most likely due to leaking water lines which traverse the eastern and northern boundaries of the site. TDS concentrations in seven wells (MW-08-03, MW-08-06, MW-08-08, SD08-MW11, SD08-MW12, SD08-MW13, S10-MW01, and S10-MW06) are greater than 10,000 mg/L. Groundwater with TDS concentrations greater than 10,000 mg/L is classified by the USEPA as a Class III B aquifer (USEPA, 1986), which is designated as unfit for human consumption. As a result of this classification, the human ingestion of groundwater at SD-08 is not a valid exposure pathway.

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6 COMPARISON OF NOVEMBER 2013 GROUNDWATER SAMPLING RESULTS TO PREVIOUS SD-08 LTM RESULTS

This section provides a comparison of the Fall 2013 quarterly groundwater results with the results of previous quarterly sampling events for the most frequently detected contaminants of concern (VOCs and TAL Metals). Monitoring well S10-MW02 was added during the sixth quarter sampling event to better delineate the 1,2-DCA contamination identified during the first five sampling events (through January 2013). Monitoring wells SD08-MW10, SD08-MW11, SD08-MW12 and SD08-MW13 were installed and added to the groundwater sampling network during the seventh quarter sampling event to better delineate the 1,2-DCA contamination identified during the first six sampling events (through April 2013).

6.1 Volatile Organic Compounds

Table 6-1 presents the current and previous LTM results for the VOCs which exceed action levels in the groundwater samples collected from the SD-08 monitoring well network (1,2-DCA and 1,2-DCP). Figure 6-1 presents 1,2-DCA concentration trends for monitoring wells MW-08-01, MW-08-02, MW-08-07, and S10-MW01. On a well by well basis, comparisons of the Fall 2013 VOC data to the previous LTM results are summarized below:

- **MW-08-01:** Concentrations of 1,2-DCA continue to exceed USEPA MCL and NMWQCC standards. The 1,2-DCA concentration decreased from 45.4 µg/L (July 2013) to 26.1 µg/L (November 2013) and has varied for the last 8 quarters (Figure 6-1). The concentration of 1,2-DCP (5.25 µg/L) has remained relatively consistent since the January 2012 event (6.49 µg/L) and now slightly exceeds the USEPA MCL (5 µg/L). 1,2-dichlorobenzene was not detected during quarter 7 but detected at 0.257 J µg/L, below the USEPA MCL of 600 µg/L in quarter 8. Benzene was been detected below the USEPA MCL and NMWQCC standards during the seventh and eighth quarterly events.

- **MW-08-02:** The concentration of 1,2-DCA has decreased dramatically from 63.9 µg/L (January 2013) to 4.02 J µg/L (November 2013). 1,2-DCA has exceeded the USEPA MCL (5 µg/L) in six of the eight quarterly sampling events (Figure 6-1). 1,2-DCP has not been detected since January 2013 (1.38 J µg/L).

- **MW-08-03:** VOCs remain undetected during the Quarter 8 sampling event (November 2013).

- **MW-08-04:** With the exception of low estimated concentrations of acetone and bromoform detected during the second quarter and fifth quarter sampling events, VOCs have not been historically detected.

- **MW-08-05:** VOCs remain undetected during the eighth quarter sampling event (November 2013).

- **MW-08-06:** VOCs have generally not been detected in this well with the exception of low estimated levels of acetone, chloroform and chloromethane observed during the second, fourth, and fifth sampling events.

- **MW-08-07:** Concentrations of 1,2-DCA continue to exceed USEPA MCL and NMWQCC standard. 1,2-DCA decreased from July 2013 and was detected in quarter eight at the lowest recorded concentration (30.5 µg/L) since January 2012 (Figure 6-1). 1,2-DCP was decrease during this quarter and was detected at 0.809 J µg/L.

- **MW-08-08:** No VOCs were detected above applicable groundwater standards in this monitoring well in November 2013 or during previous LTM sampling events (Table 6-1). Benzene was detected at 1.23 J µg/L during this quarter, below the USEPA MCL and NMWQCC standards.

- **SD08-MW10:** Benzene was the only VOC detected above USEPA MCL and NMWQCC standards during the Quarter 8 sampling event. Benzene was first detected in the Quarter 7 (July 2013) sampling event at a concentration of 58.4 µg/L and was detected at 62.9 µg/L during the Quarter 8 (November 2013) sampling event. Benzene exceeded the USEPA MCL and NMWQCC standards during both the Quarter 7 and Quarter 8 sampling events (Figure 6-1). SD08-MW10 was installed to be an upgradient well to the SD-08 site in an effort to identify the source, extent of the groundwater contamination, and groundwater plume boundary.

- **SD08-MW11:** The concentration of 1,2-DCA was reported as 77.3 µg/L (November 2013) and exceeded the USEPA MCL (5 µg/L) during the Quarter 8 sampling event (Figure 6-1). 1,2-DCP was detected at 4.73 J µg/L during the Quarter 8 sampling event, a decrease from quarter 7 (5.37 µg/L). The current concentration of 1,2-DCP is below the USEPA MCL (5 µg/L). SD08-MW11 was installed to be an upgradient well to the SD-08 site in an effort to identify the source, extent of the groundwater contamination, and groundwater plume boundary.

- **SD08-MW12:** No VOCs have been detected above applicable groundwater standards since sampling began for VOCs in July 2013 (Quarter 7). The SD08-MW12 well was installed to be a downgradient well to the SD-08 site in an effort to identify the easterly extent of the groundwater contamination and groundwater plume boundary.

- **SD08-MW13:** No VOCs have been detected above applicable groundwater standards since sampling began for VOCs in July 2013 (Quarter 7). The SD08-MW13 well was installed to be a downgradient well to the SD-08 site in an effort to identify the southeastern extent of the groundwater contamination and groundwater plume boundary.

- **S10-MW01:** Concentrations of 1,2-DCA (22 µg/L) have remained relatively consistent over the eight quarters and continues to exceed the USEPA MCL (5 µg/L) and NMWQCC standard (10 µg/L). Trichloroethene, which was initially detected in April 2012, was not detected in Quarter 8 (November 2013).

- **S10-MW02:** No VOCs have been detected above applicable groundwater standards since sampling began for VOCs in April 2013 (Quarter 6).

- **S10-MW06:** No VOCs have been detected above applicable groundwater standards since sampling began for VOCs in July 2012 (Quarter 3).

- **SWMU183-MW03:** No VOCs have been detected above applicable groundwater standards since sampling began for VOCs in April 2012 (Quarter 2).

6.2 Metals

Table 6-1 shows current and previous LTM results for the most frequently detected dissolved (filtered) TAL metals (arsenic, iron and manganese) in groundwater at Site SD-08. On a well by well basis, comparisons of the Fall 2013 dissolved TAL metals data to the previous LTM results are summarized below:

- **MW-08-01:** Concentrations of dissolved iron and manganese remained relatively consistent from January 2013 to November 2013 and continue to exceed NMWQCC standards. Dissolved arsenic was detected at the highest recorded concentration and exceeded the NMWQCC standard for Quarter 6, but was not detected in Quarters 7 and 8. Antimony detected above the USEPA MCL (6 µg/L) during the fourth and fifth quarters was not detected during the sixth and eighth quarters. Dissolved iron was detected above the USEPA secondary MCL (300 µg/L) at MW-08-01 during all 8 quarters. All other dissolved TAL metal concentrations have remained relatively constant and were detected below NMWQCC standards and USEPA MCLs.

- **MW-08-02:** Concentrations of dissolved iron and manganese continue to exceed applicable USEPA Primary and Secondary MCLs during the eighth quarter. Dissolved arsenic was detected at 14 J µg/L, exceeding the USEPA MCL of 10 µg/L, but below the NMWQCC standard of 100 µg/L. Dissolved thallium, detected above the USEPA MCL (2 µg/L) during the October 2012 sampling event and the April 2013, was detected below the USEPA MCL in the November 2013 sampling event. Dissolved iron was again detected at MW-08-02 above the

USEPA secondary MCL (300 µg/L), while manganese decreased to 1,620 µg/L during the eighth quarter and exceeded the USEPA secondary MCL (50 µg/L) for the eighth consecutive quarter. All other dissolved metals remained below their applicable NMWQCC and USEPA action levels.

- **MW-08-03:** Dissolved arsenic, iron, and manganese continue to go undetected. Dissolved antimony and thallium which exceeded their respective USEPA MCLs for the first time in the fifth quarterly sampling event were not detected in the eighth quarter. All other total TAL metals remained below applicable NMWQCC and USEPA action levels.

- **MW-08-04:** Dissolved arsenic was detected at 7.4 µg/L, below applicable action levels, in the 8th quarter. Manganese was detected in MW-08-04 (292 µg/L), above the USEPA MCLs during the July 2013 sampling, was detected below the MCLs during quarter 8. Iron remains undetected at MW-08-04. Thallium and aluminum which had previously exceeded applicable action levels were not detected during the eighth quarter. All other total TAL metals remained below applicable NMWQCC and USEPA action levels.

- **MW-08-05:** Dissolved arsenic decreased from 11 J µg/L in April 2013 to non-detect in November 2013. Dissolved iron was detected in MW-08-05 (1,310 µg/L) during the November 2013 sampling event, above the USEPA secondary MCL (300 µg/L) and NMWQCC standard (1,000 µg/L). Dissolved manganese increased to 130.0 µg/L during the eighth quarter and exceeded the USEPA secondary MCL (50 µg/L) in November 2013. Dissolved antimony, the only other TAL metal historically detected above the USEPA MCL (6 µg/L), was not detected in November 2013.

- **MW-08-06:** Concentrations of dissolved arsenic were detected at 72 J µg/L during the eighth quarter (November 2013) exceeding the USEPA secondary MCL (10 µg/L), but not exceeding the NMWQCC standard (100 µg/L). Dissolved iron and manganese continue to be undetected at MW-08-06. Dissolved thallium, detected for the first time during the fourth quarter, was not detected during the eighth quarter.

- **MW-08-07:** November 2013 concentrations of dissolved arsenic (40 µg/L) remain relatively consistent with the previous seven quarters. Dissolved iron was detected at 67 J µg/L, below USEPA and NMWQCC standards, during quarter 8. The dissolved manganese concentration (1,350 µg/L) remains relatively consistent with previous quarters and exceeds the USEPA secondary MCL (50 µg/L) and NMWQCC standard (1,000 µg/L). Antimony, which is the only other TAL metal historically detected above the USEPA MCL (6 µg/L), went undetected during this eighth quarter (November 2013).

- **MW-08-08:** Dissolved arsenic, which had increased to the highest recorded concentration during the fourth quarter (October 2012), has not been detected in the subsequent four quarters. Dissolved iron also continues to be undetected, while dissolved manganese exceeded the USEPA secondary MCL (50 µg/L) in quarter seven (95 µg/L) and both the USEPA secondary MCL and NMWQCC standard (200 µg/L) in quarter 8 (890 µg/L). Antimony is the only other TAL metal previously detected above a USEPA MCL that was not detected during the eighth quarter (November 2013).

- **SD08-MW10:** Dissolved arsenic which was again detected during the eighth quarter (November 2013) at 35 µg/L, was above the USEPA secondary MCL (10 µg/L) and below the NMWQCC standard (100 µg/L). Dissolved iron was detected in SD08-MW10 (1,270 µg/L) during the November 2013 sampling event, above the USEPA secondary MCL (300 µg/L) and NMWQCC standard (1,000 µg/L). Manganese was also detected at 2,570 µg/L and exceeds the USEPA secondary MCL (50 µg/L) and NMWQCC standard (200 µg/L). All other dissolved metals remained below their applicable NMWQCC and USEPA action levels.

- **SD08-MW11:** Manganese was detected at 2,300 µg/L and exceeds the USEPA secondary MCL (50 µg/L) and NMWQCC standard (200 µg/L). All other dissolved metals remained below their applicable NMWQCC and USEPA action levels.

- **SD08-MW12:** Dissolved arsenic and lead were not detected during the eighth quarter (November 2013). Manganese was detected at 66 J µg/L and exceeds the USEPA secondary MCL (50 µg/L). Dissolved copper was detected at 370 µg/L and dissolved vanadium at 600 µg/L, below applicable NMWQCC and USEPA action levels. Both exceeded Holloman's approved background levels of 22 µg/L and 73.8 µg/L, respectively. All other dissolved metals remained below their applicable NMWQCC and USEPA action levels.

- **SD08-MW13:** All dissolved metals were reported below their applicable NMWQCC and USEPA action levels. Dissolved copper was detected at 320 µg/L and dissolved vanadium at 630 µg/L, both exceeding the approved background levels of 22 µg/L and 73.8 µg/L, respectively.

- **S10-MW01:** Dissolved arsenic was not detected during the eighth quarter (November 2013). Concentrations of dissolved manganese (280 µg/L) remains above the USEPA MCL (50 µg/L) and NMWQCC standard (200 µg/L). Dissolved iron remains undetected during the eighth quarterly event. Thallium is the only other TAL metal detected above the USEPA MCLs but went undetected during the eighth quarter. Antimony was detected for the first time during the fourth quarterly sampling event (October 2012) but went undetected during the eighth

quarter. Vanadium was detected at 530 µg/L, below applicable NMWQCC and USEPA action levels, but exceeding Holloman's approved background level (73.8 µg/L).

- **S10-MW02:** Dissolved arsenic increased from 7.1 J µg/L in July 2013 to 13.0 J µg/L in November 2013, which is above the USEPA secondary MCL (10 µg/L) but below the NMWQCC standard (100 µg/L). All other dissolved metals remained below their applicable NMWQCC and USEPA action levels.

- **S10-MW06:** Dissolved arsenic was not detected in the eighth quarter (November 2013). Dissolved iron continues to be undetected, while dissolved manganese decreased from the previous quarter (July 2013) to 150 µg/L, which is above the USEPA secondary MCL (50 µg/L). Antimony is the only other metal previously detected above the USEPA MCL but was not detected in the eighth quarter. Dissolved copper was detected at 180 µg/L and dissolved vanadium at 490 µg/L, below applicable NMWQCC and USEPA action levels. Both exceeded Holloman's approved background levels of 22 µg/L and 73.8 µg/L, respectively.

- **SWMU183-MW03:** Dissolved arsenic was not detected in the eighth quarter (November 2013). Concentrations of dissolved manganese (920 µg/L) remain constant above the NMWQCC standard, while dissolved iron remains undetected during the eighth quarterly sampling event. Antimony was detected for the first time in October 2012 and was again detected in the eighth quarter (November 2013) at a concentration of 230 J µg/L.

7 CONCLUSIONS AND RECOMMENDATIONS

The SD-08 LTM quarterly groundwater sampling program was developed to address COCs (VOCs [1,2-DCA and 1,2-DCP] and TAL Metals [arsenic, iron and manganese]) identified during the 2006 RFI. The primary purpose of the SD-08 LTM sampling groundwater program is to determine if natural attenuation is degrading the previously identified COCs. Analytical results obtained during the eighth quarterly sampling event (Fall 2013) were evaluated and compared with the results of the previous quarterly sampling events (January, April, July, October 2012, and January, April and July2013). Based on the results of the first seven quarterly sampling events the following actions were implemented. These actions were completed during the eighth quarterly sampling event (Fall 2013), in accordance with NMED authorization:

- In order to further define the extent of the 1,2-DCA plume it was recommended by NMED to sample previously installed monitoring well S10-MW02 (as a Site SD-08 cross-gradient monitoring well) during the sixth quarter (April 2013) and future quarterly sampling events (NMED, 2012b). The location of this well is shown on Figure 4-1.
- Four new monitoring wells (SD08-MW10, SD08-MW11, SD08-MW13, and SD08-MW13) were added to the SD08 network in response to correspondence from the NMED dated October 5, 2012 (NMED, 2012b).
- Based on the Conditional Approval letter, SD-08 LTM Report, Quarter 2, Spring 2012 from NMED dated October 5, 2012 (NMED, 2012b) chloride, fluoride, and sulfite anion analysis were removed from the LTM program.

Overall, there appears to be a slight decrease in 1,2-DCA and 1,2-DCP concentrations during the eighth quarterly SD-08 groundwater sampling event compared with the seventh quarterly event (Table 6-1). The following paragraphs summarize the detection and distribution of pertinent COCs and discuss subsequent recommendations.

During the eighth quarter sampling event (November 2013), 1,2-DCA exceeded the USEPA MCL (5 µg/L) in four of the Site SD-08 monitoring wells (MW-08-01, MW-08-07, SD08-MW11, and S10-MW01). As shown in Figure 6-1, 1,2-DCA concentrations have generally decreased in monitoring well MW-08-07 and remained relatively constant in wells S10-MW01, MW-08-01, MW-08-02, and SD08-MW11. The decreasing 1,2-DCA concentration trend in MW-08-07 and constant 1,2-DCA trend in MW-08-01 suggest that the 1,2-DCA groundwater plume is attenuating and migrating slowly downgradient from AOC-RR (Figure 5-2). As shown on Figure 5-2, the concentrations of 1,2-DCA identified in these four monitoring wells exhibit an east - southeasterly migration of 1,2-DCA across the SD-08 Site. The four monitoring wells with 1,2-DCA exceedences are bound to the north and south by five monitoring wells (MW-08-03, MW-08-04, MW-08-06, MW-08-08 and SWMU183-MW03) which have not historically detected 1,2-DCA during the LTM program (Table 6-1 and Figure 5-2). As previously discussed in Section 2.3, and shown on Figure 3-4 of Appendix A, historical AOC-RR groundwater samples

had elevated 1,2-DCA results that ranged from 9 µg/L to 440 µg/L in six of the AOC-RR groundwater samples (GP-01, GP-04, GP-05, GP-06, GP-09, and GP-11).

These groundwater samples were collected immediately downgradient of Building 80 and the suspected underground storage tanks in April 1995 (EBASCO/GTI, 1995). The direction of groundwater at SD-08 is towards the east - southeast (Figure 4-1). As identified in prior reports, it can be derived that the source of 1,2-DCA groundwater contamination is from the AOC-RR Site located due west of Site SD-08 (Figure 5-2).

During the Quarter 8 sampling event (November 2013), benzene was detected in five of the Site SD-08 monitoring wells (MW-08-01, MW-08-08, SD08-MW10, SD08-MW11, and SWMU183-MW03) and exceeded the USEPA MCL (5 µg/L) and the NMWQCC standard (10 µg/L) in SD08-MW10 (62.9 µg/L). The benzene concentration has risen in monitoring well SD08-MW10 during the eighth quarter. Monitoring wells MW-08-01, MW-08-08, and SD08-MW11, and SWMU183-MW03 reported detections in Quarter 8 but were below the applicable USEPA MCL and NMWQCC standards. The increasing benzene concentration trend in MW-08-01, MW-08-08, SD08-MW10, SD08-MW11, and SWMU183-MW03 suggest that the benzene groundwater plume is migrating slowly downgradient from AOC-RR, specifically the area in the vicinity of Building 80.

Presented below are the recommendations to further delineate the nature and extent of the groundwater contamination currently present at Site SD-08:

- Currently, the eastern boundary of the groundwater contaminate plume has been identified with the addition of SD08-MW12 and SD08-MW13. The western boundary of the groundwater contaminate plume remains unknown, as the two newly installed wells (SD08-MW10 [Benzene] and SD08-MW11 [1,2-DCA]) reported contaminates above their respective USEPA MCLs and NMWQCC standards. Therefore, it is recommended that two (2) upgradient monitoring wells be installed to the northwest and west-northwest of Building 80, in an effort to identify the western extent of Benzene; and one monitoring well installed west of the suspected former AOC–RR UST location, in an effort to identify the western extent of 1,2-DCA (Figure 5-3). The three proposed monitoring wells will further delineate the source of the benzene and 1,2-DCA currently present above the applicable NMWQCC and USEPA MCL action levels in SD08-MW10 and SD08-MW11, respectively. These proposed wells should be included in future sampling events associated with the Site SD-08.
- Sampling should continue at existing monitoring wells MW-08-01 through MW-08-08, SWMU183-MW03, SD08-MW10 through SD08-MW13, S10-MW01, S10-MW02, and S10-MW06 for VOCs, TAL metals (dissolved), mercury (total), nitrate, and TDS.

Dissolved TAL Metals detected at concentrations above the applicable action levels (arsenic, iron, manganese, and thallium) are observed in monitoring wells located throughout Site SD-08. The distribution of these four TAL metals at Site SD-08 is ubiquitous, including cross-gradient monitoring wells (SWMU183-MW03, MW-08-04, MW-08-06, MW-08-08) and down-gradient monitoring wells (S10-MW06 and SD08-

MW13) which have not been impacted by VOC groundwater contamination. Therefore, arsenic, iron, manganese, and thallium detected at Site SD-08 are most likely the result of the natural geochemistry of the local groundwater.

Total dissolved solids exceed NMWQCC and USEPA MCL action levels throughout the SD-08 monitoring well network. TDS concentrations in eight wells (MW-08-03, MW-08-06, MW-08-08, SD08-MW11, SD08-MW12, SD08-MW13, S10-MW01, and S10-MW06) are greater than 10,000 mg/L. Groundwater with TDS concentrations greater than 10,000 mg/L is classified by the USEPA as a Class III B aquifer (USEPA, 1986), which is designated as unfit for human consumption. As a result of this classification, the human ingestion of groundwater at Site SD-08 is not a valid exposure pathway.

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USEPA. November 2012. *USEPA Regions 3, 6, and 9 Regional Screening Levels.* (http://www.epa.gov/Region6/6pd/rcra_c/pd-n/screen.htm).

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FIGURES

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NATIONVIEW

Holloman Air Force Base
New Mexico
Location Map

PROJECT NO:	SCALE:	DATE:	DRAWN BY:
10-0004	0 60,000 120,000 240,000 Feet	2/20/14	FRE
			DRAWING NO: Figure 2-1

SD-08
Long Term Monitoring Report
Quarter 8, Fall 2013
Holloman Air Force Base, New Mexico

Figure 2-1

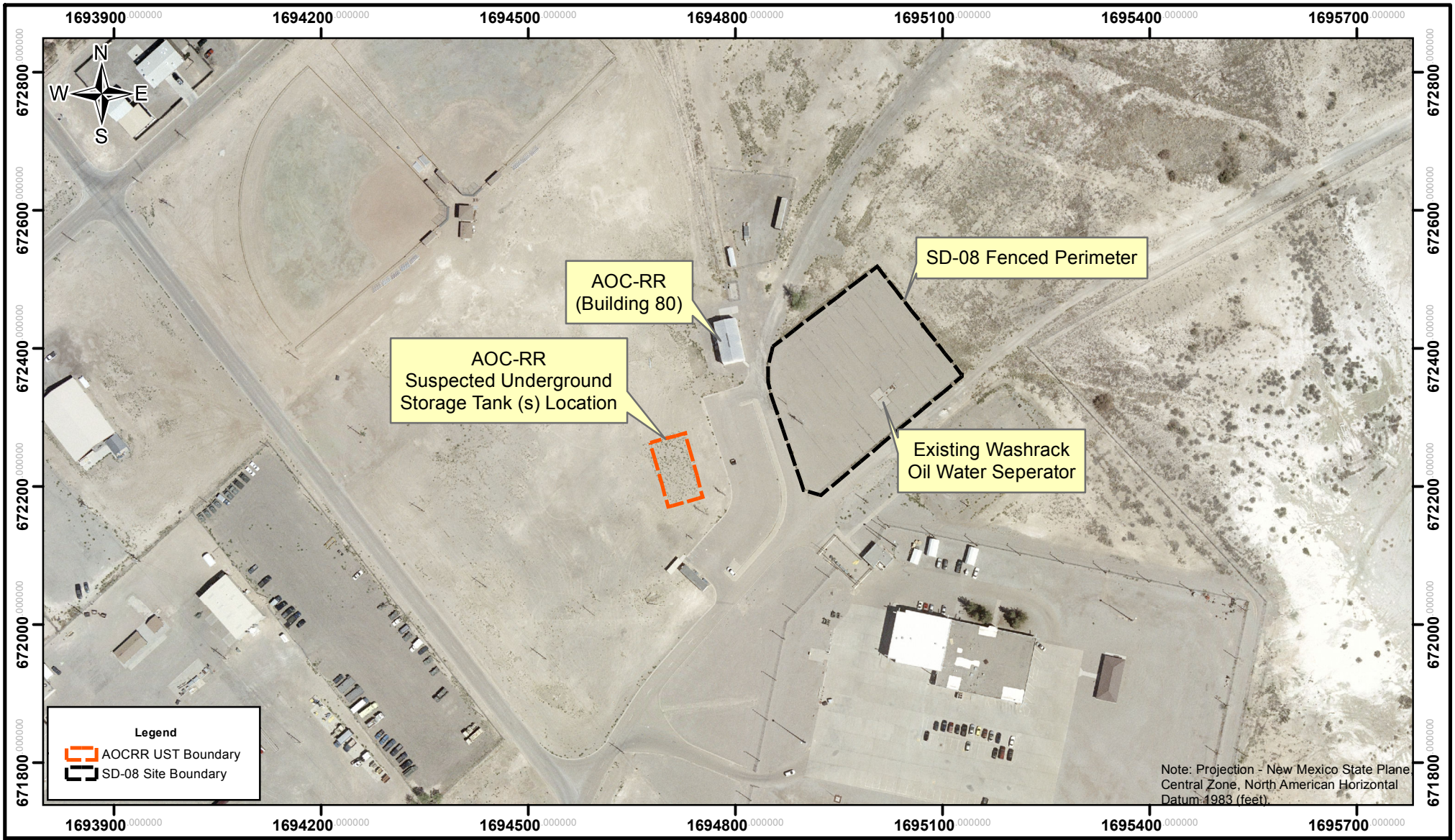
NATIONVIEW

SD-08
Site Location Map

PROJECT NO:	SCALE:	DATE:	DRAWN BY:
10-0004	0 0.25 0.5 Miles	2/20/14	FRE
			DRAWING NO: Figure 2-2

SD-08
Long Term Monitoring Report
Quarter 8, Fall 2013
Holloman Air Force Base, New Mexico

Figure 2-2



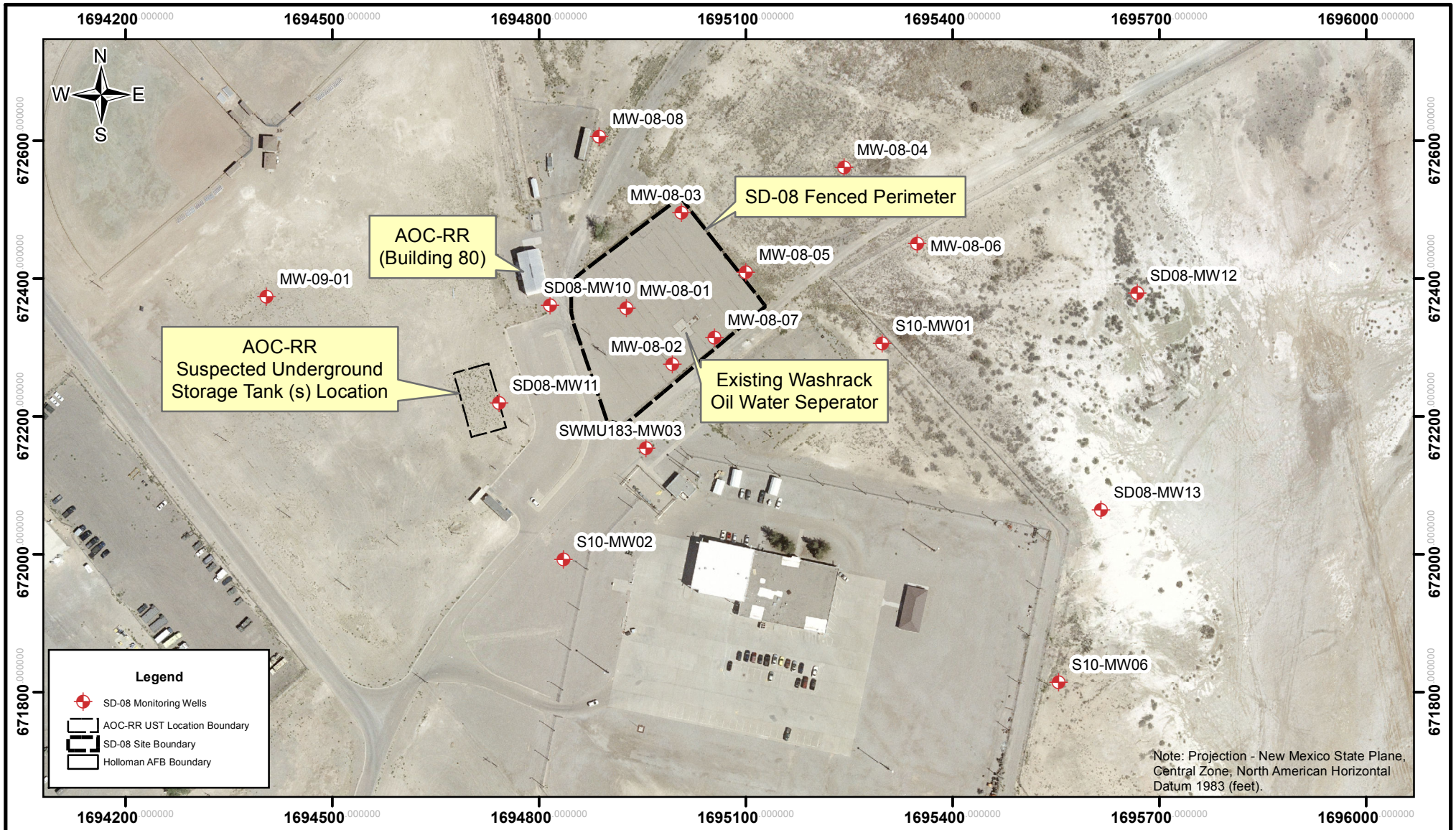
NATIONVIEW

SD-08
Site Plan

PROJECT NO:	SCALE:	DATE:	DRAWN BY:
10-0004	0 75 150 300 Feet	2/20/14	FRE
			DRAWING NO: Figure 2-3

SD-08
Long Term Monitoring Report
Quarter 8, Fall 2013
Holloman Air Force Base, New Mexico

Figure 2-3



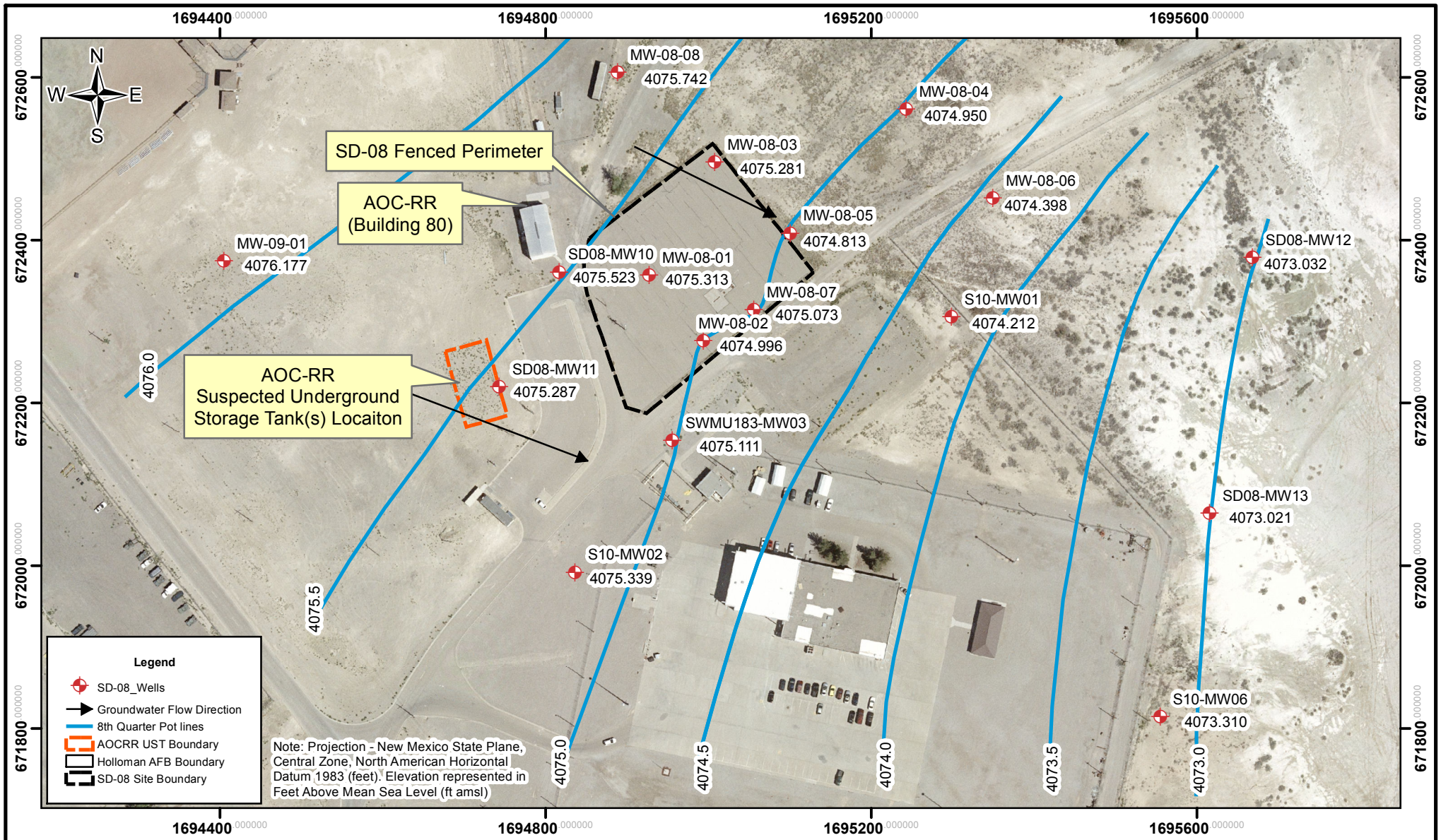
NATIONVIEW

Monitoring Well Location Map

PROJECT NO:	SCALE:	DATE:	DRAWN BY:
10-0004	0 75 150 300 Feet	2/20/14	FRE
			DRAWING NO: Figure 4-1

SD-08
Long Term Monitoring Report
Quarter 8, Fall 2013
Holloman Air Force Base, New Mexico

Figure 4-1



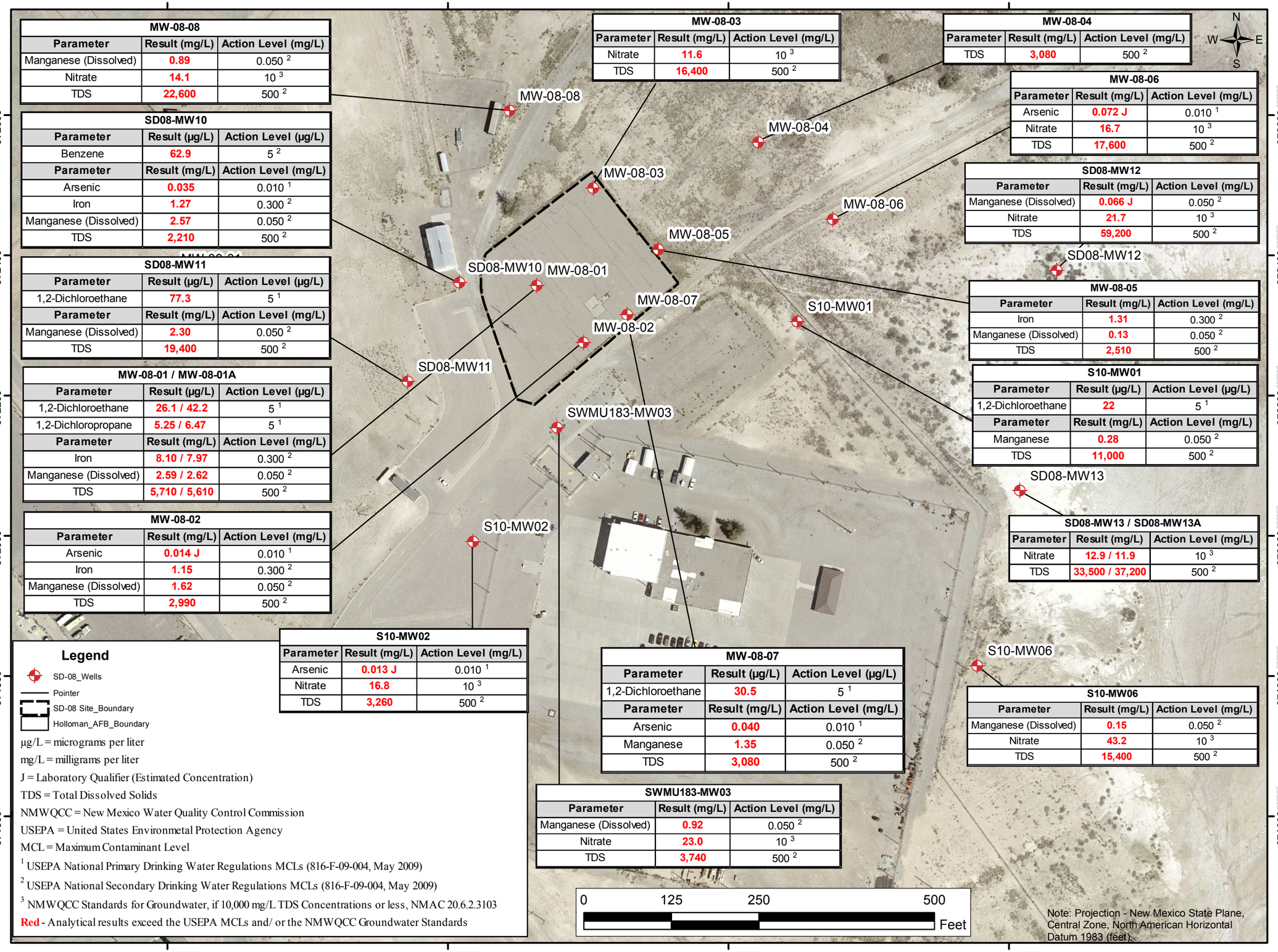
NATIONVIEW

Site SD-08
Groundwater Potentiometric Map
(November 2013)

PROJECT NO:	SCALE:	DATE:	DRAWN BY:
10-0004	0 125 250 Feet	2/20/14	FRE
			DRAWING NO: Figure 4-2

SD-08
Long Term Monitoring Report
Quarter 8, Fall 2013
Holloman Air Force Base, New Mexico

Figure 4-2



MW-08-08		
Parameter	**Result (mg/L)**	**Action Level (mg/L)**
Manganese (Dissolved)	0.89	0.050 [2]
Nitrate	14.1	10 [3]
TDS	22,600	500 [2]

SD08-MW10		
Parameter	**Result (µg/L)**	**Action Level (µg/L)**
Benzene	62.9	5 [2]
Parameter	**Result (mg/L)**	**Action Level (mg/L)**
Arsenic	0.035	0.010 [1]
Iron	1.27	0.300 [2]
Manganese (Dissolved)	2.57	0.050 [2]
TDS	2,210	500 [2]

SD08-MW11		
Parameter	**Result (µg/L)**	**Action Level (µg/L)**
1,2-Dichloroethane	77.3	5 [1]
Parameter	**Result (mg/L)**	**Action Level (mg/L)**
Manganese (Dissolved)	2.30	0.050 [2]
TDS	19,400	500 [2]

MW-08-01 / MW-08-01A		
Parameter	**Result (µg/L)**	**Action Level (µg/L)**
1,2-Dichloroethane	26.1 / 42.2	5 [1]
1,2-Dichloropropane	5.25 / 6.47	5 [1]
Parameter	**Result (mg/L)**	**Action Level (mg/L)**
Iron	8.10 / 7.97	0.300 [2]
Manganese (Dissolved)	2.59 / 2.62	0.050 [2]
TDS	5,710 / 5,610	500 [2]

MW-08-02		
Parameter	**Result (mg/L)**	**Action Level (mg/L)**
Arsenic	0.014 J	0.010 [1]
Iron	1.15	0.300 [2]
Manganese (Dissolved)	1.62	0.050 [2]
TDS	2,990	500 [2]

MW-08-03		
Parameter	**Result (mg/L)**	**Action Level (mg/L)**
Nitrate	11.6	10 [3]
TDS	16,400	500 [2]

MW-08-04		
Parameter	**Result (mg/L)**	**Action Level (mg/L)**
TDS	3,080	500 [2]

MW-08-06		
Parameter	**Result (mg/L)**	**Action Level (mg/L)**
Arsenic	0.072 J	0.010 [1]
Nitrate	16.7	10 [3]
TDS	17,600	500 [2]

SD08-MW12		
Parameter	**Result (mg/L)**	**Action Level (mg/L)**
Manganese (Dissolved)	0.066 J	0.050 [2]
Nitrate	21.7	10 [3]
TDS	59,200	500 [2]

MW-08-05		
Parameter	**Result (mg/L)**	**Action Level (mg/L)**
Iron	1.31	0.300 [2]
Manganese (Dissolved)	0.13	0.050 [2]
TDS	2,510	500 [2]

S10-MW01		
Parameter	**Result (µg/L)**	**Action Level (µg/L)**
1,2-Dichloroethane	22	5 [1]
Parameter	**Result (mg/L)**	**Action Level (mg/L)**
Manganese	0.28	0.050 [2]
TDS	11,000	500 [2]

SD08-MW13 / SD08-MW13A		
Parameter	**Result (mg/L)**	**Action Level (mg/L)**
Nitrate	12.9 / 11.9	10 [3]
TDS	33,500 / 37,200	500 [2]

S10-MW02		
Parameter	**Result (mg/L)**	**Action Level (mg/L)**
Arsenic	0.013 J	0.010 [1]
Nitrate	16.8	10 [3]
TDS	3,260	500 [2]

MW-08-07		
Parameter	**Result (µg/L)**	**Action Level (µg/L)**
1,2-Dichloroethane	30.5	5 [1]
Parameter	**Result (mg/L)**	**Action Level (mg/L)**
Arsenic	0.040	0.010 [1]
Manganese	1.35	0.050 [2]
TDS	3,080	500 [2]

S10-MW06		
Parameter	**Result (mg/L)**	**Action Level (mg/L)**
Manganese (Dissolved)	0.15	0.050 [2]
Nitrate	43.2	10 [3]
TDS	15,400	500 [2]

SWMU183-MW03		
Parameter	**Result (mg/L)**	**Action Level (mg/L)**
Manganese (Dissolved)	0.92	0.050 [2]
Nitrate	23.0	10 [3]
TDS	3,740	500 [2]

Legend

- SD-08_Wells
- Pointer
- SD-08 Site_Boundary
- Holloman_AFB_Boundary

µg/L = micrograms per liter
mg/L = milligrams per liter
J = Laboratory Qualifier (Estimated Concentration)
TDS = Total Dissolved Solids
NMWQCC = New Mexico Water Quality Control Commission
USEPA = United States Environmetal Protection Agency
MCL = Maximum Contaminant Level
[1] USEPA National Primary Drinking Water Regulations MCLs (816-F-09-004, May 2009)
[2] USEPA National Secondary Drinking Water Regulations MCLs (816-F-09-004, May 2009)
[3] NMWQCC Standards for Groundwater, if 10,000 mg/L TDS Concentrations or less, NMAC 20.6.2.3103
Red - Analytical results exceed the USEPA MCLs and/ or the NMWQCC Groundwater Standards

Note: Projection - New Mexico State Plane, Central Zone, North American Horizontal Datum 1983 (feet).

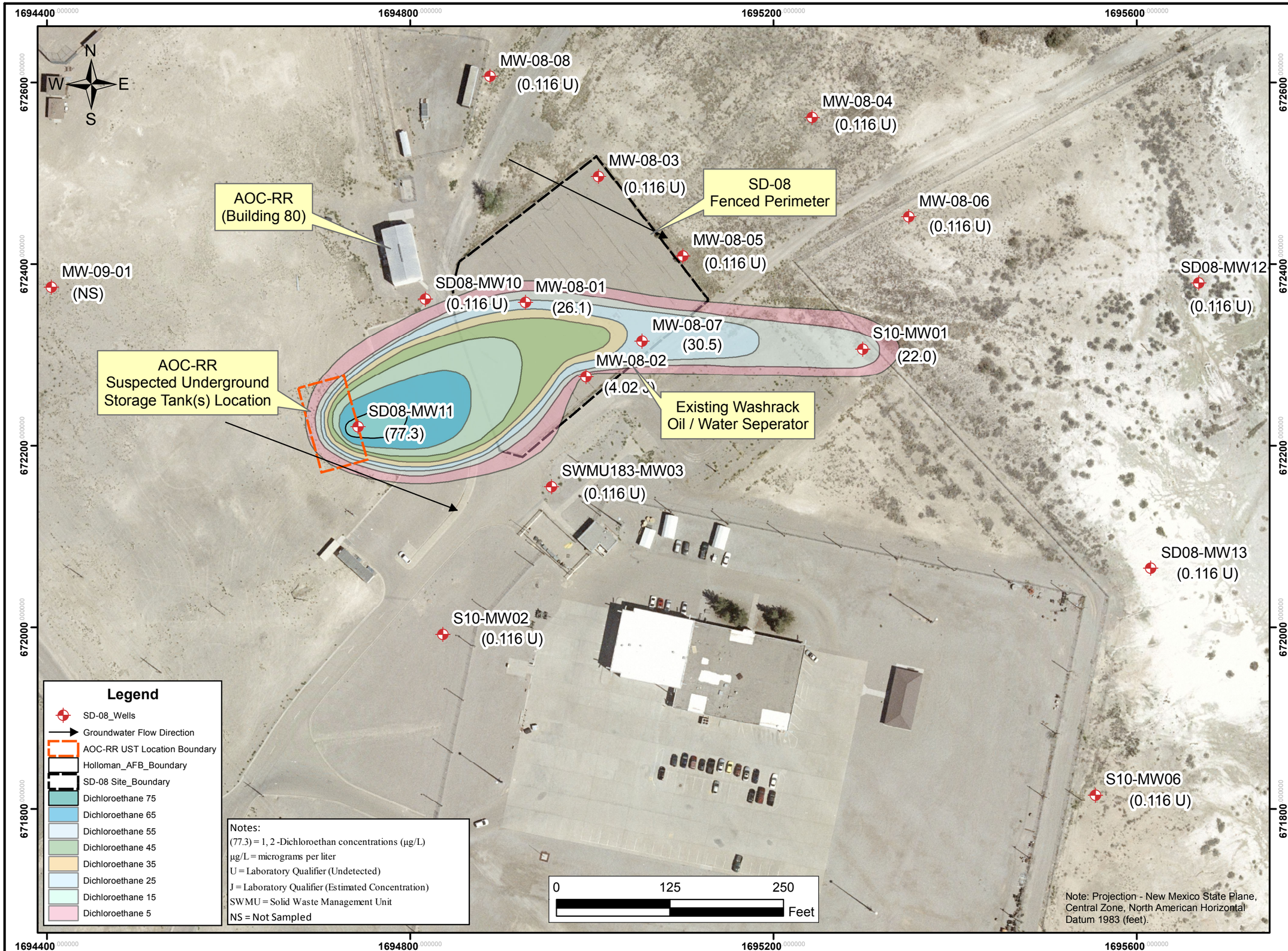
SD-08
Long Term Monitoring Report
Quarter 8, Fall 2013
Holloman Air Force Base, New Mexico

Figure 5-1

SD-08
Groundwater Analytical Results
Above Action Levels (November 2013)

DRAWN BY:	FRE
DRAWING NO.:	Figure 5-1
DATE:	2/20/14
SCALE:	1" = 250'
PROJECT NO:	10-0004

NATIONVIEW



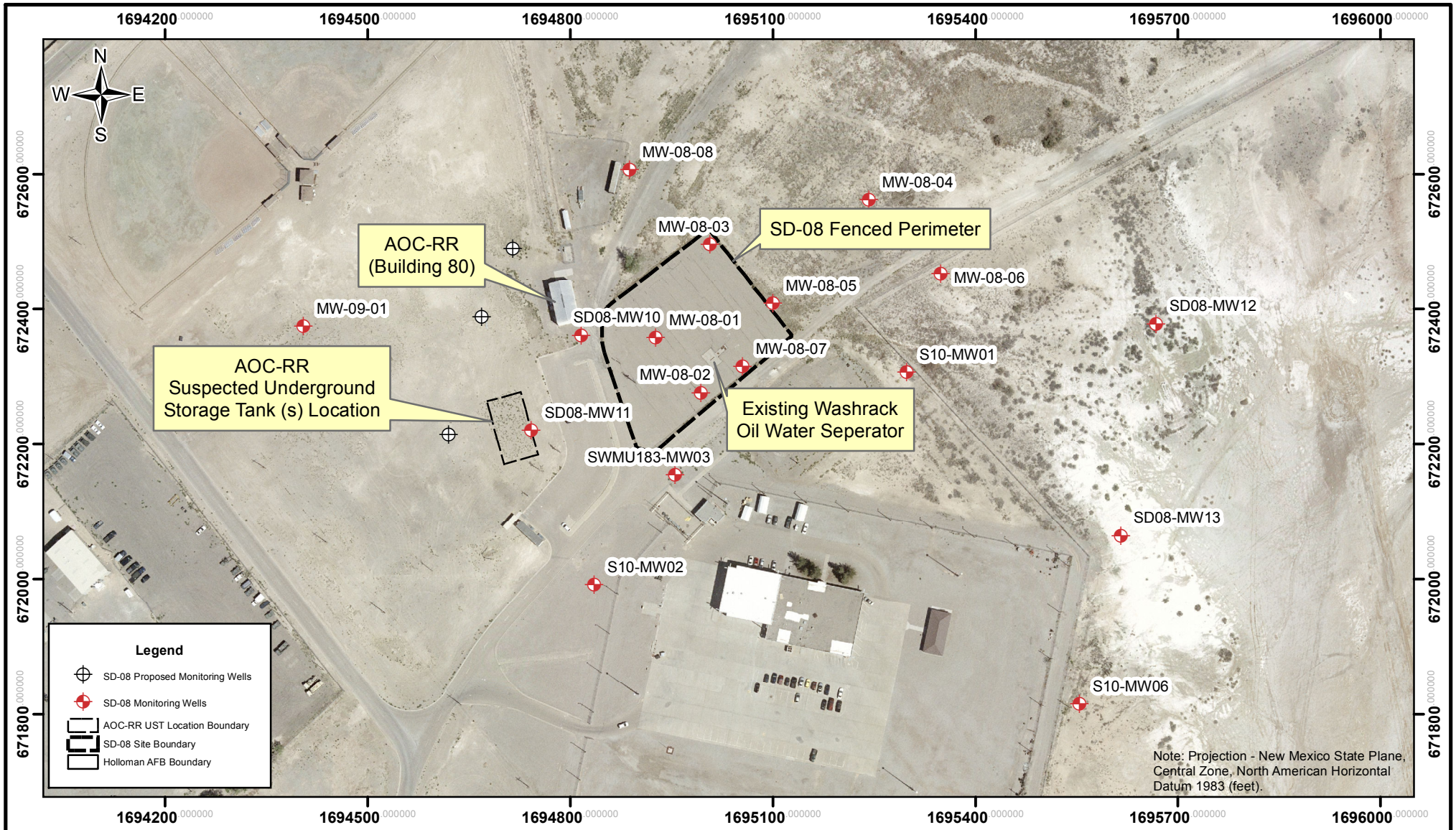
SD-08
Long Term Monitoring Report
Quarter 8, Fall 2013
Holloman Air Force Base, New Mexico

Figure 5-2

SD-08
Dichloroethane Isocontour Map
Above Action Levels (November 2013)

DRAWN BY:	FRE
DRAWING NO.:	Figure 5-2
DATE:	2/20/14
SCALE:	1" = 125'
PROJECT NO:	10-0004

NATIONVIEW



NATIONVIEW

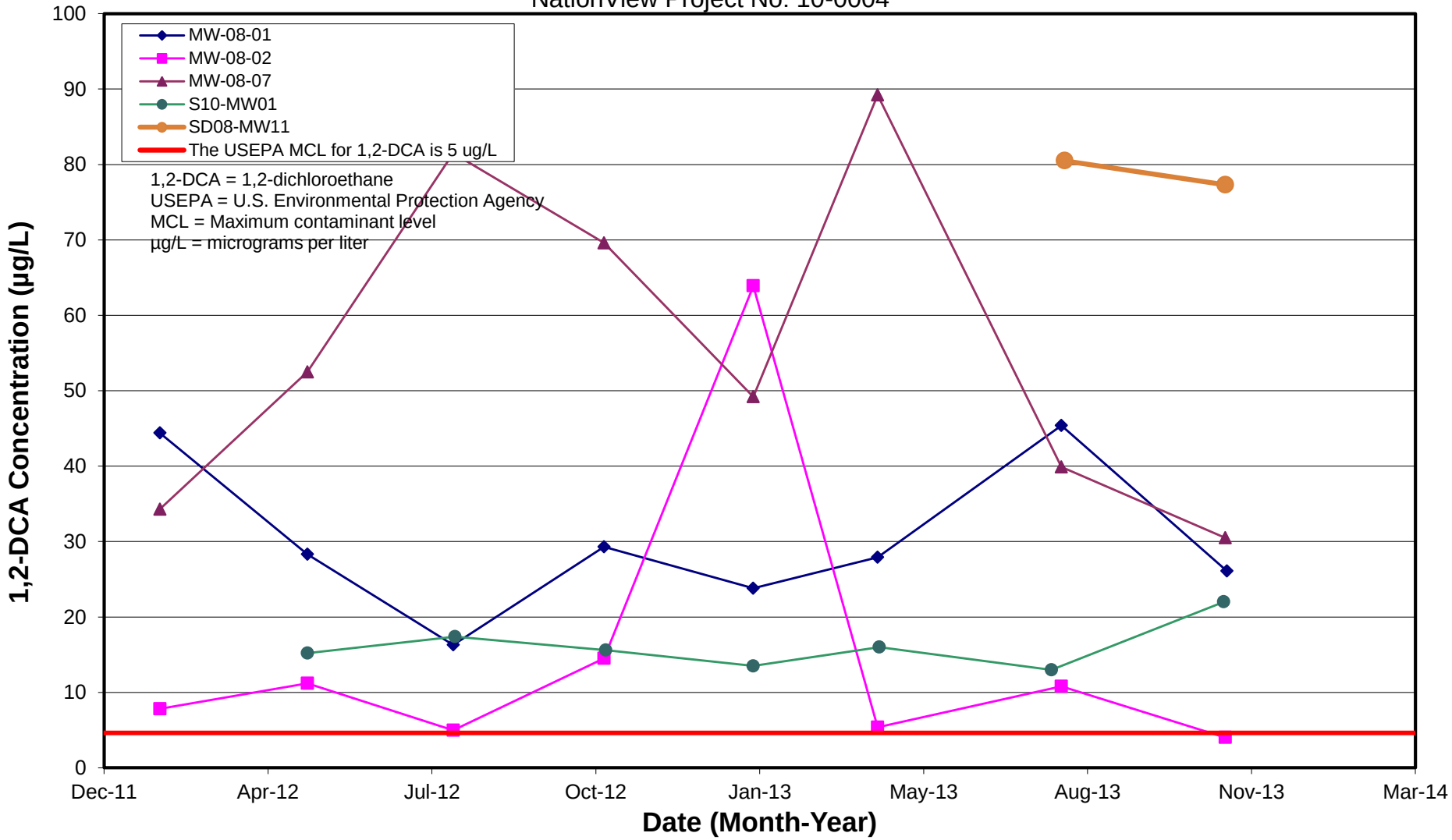
Proposed Monitoring Wells

PROJECT NO:	SCALE:	DATE:	DRAWN BY:
10-0004	0 75 150 300 Feet	2/20/14	FRE
			DRAWING NO: Figure 5-3

SD-08
Long Term Monitoring Report
Quarter 8, Fall 2013
Holloman Air Force Base, New Mexico

Figure 5-3

Figure 6-1
1,2-Dichloroethane Concentration Trends in SD-08 Monitoring Wells
Building 131 Washrack (SD-08), Holloman AFB, New Mexico
NationView Project No: 10-0004



TABLES

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Table 4-1
Groundwater Elevation Summary (Fall 2013)
Building 131 Washrack (SD-08)
Holloman Air Force Base, New Mexico
NationView Project No. 10-0004

Well Point Number	Northing (UTM meters)	Easting (UTM meters)	Elevation TOC (ft above msl)	November 4, 2013 DTW from TOC (ft below TOC)	Groundwater Elevation November 4, 2013 (ft above msl)
MW-08-01	3634971.461	399637.973	4088.273	12.96	4075.313
MW-08-02	3634945.696	399658.149	4088.726	13.73	4074.996
MW-08-03	3635013.345	399663.352	4087.971	12.69	4075.281
MW-08-04	3635032.485	399734.579	4085.640	10.69	4074.950
MW-08-05	3634985.891	399691.393	4086.543	11.73	4074.813
MW-08-06	3634998.180	399766.517	4084.648	10.25	4074.398
MW-08-07	3634957.670	399676.883	4085.403	10.33	4075.073
MW-08-08	3635047.194	399626.968	4085.072	9.33	4075.742
MW-09-01	3634977.965	399479.072	4085.437	9.26	4076.177
SD08-MW10	3634973.540	399604.2681	4086.683	11.16	4075.523
SD08-MW11	3634929.961	399582.7143	4088.027	12.74	4075.287
SD08-MW12	3634976.038	399863.7146	4076.212	3.18	4073.032
SD08-MW13	3634881.186	399846.4628	4074.681	1.66	4073.021
S10-MW01	3634953.884	399751.455	4086.882	12.67	4074.212
S10-MW02	3634860.324	399609.385	4088.499	13.16	4075.339
S10-MW06	3634803.437	399827.361	4083.500	10.19	4073.310
SWMU183-MW03	3634908.694	399645.623	4086.261	11.15	4075.111

Notes:
UTM = Universal Transverse Mercator
TOC = Top of Casing
DTW = Depth to Water
ft = feet
msl = mean sea level

Table 5-1
Groundwater Analytical Data (November 2013)
Building 131 Washrack (SD-08)
Holloman Air Force Base, New Mexico
NationView Project No. 10-0004

Client Sample Identification:	Groundwater Screening Levels		Basewide Background			MW-08-01			MW-08-01A			MW-08-02			MW-08-03			MW-08-04			MW-08-05			MW-08-06		
Lab Sample Identification:	NMWQCC[1]	USEPA MCL [2]	NMED Approved Background Levels [3]	Dissolved Metals in Groundwater UTL [4]	Total Metals in Groundwater UTL [4]	21311080904			21311080905			21311080902			21311080903			21311061108			21311061109			21311061105		
Date Sampled:						11/7/2013			11/7/2013			11/6/2013			11/7/2013			11/5/2013			11/5/2013			11/5/2013		
Analyte						Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1
Volatile Organic Compounds (8260B)	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
1,2-Dichlorobenzene	NV	600	NV	NV	NV	0.257	J		0.258	J		0.135	U		0.135	U		0.135	U		0.135	U		0.135	U	
1,2-Dichloroethane	10	5	NV	NV	NV	**26.1**		J	**42.2**		J	4.02	J		0.116	U		0.116	U		0.116	U		0.116	U	
1,2-Dichloropropane	NV	5	NV	NV	NV	**5.25**			**6.47**			0.15	U		0.15	U		0.15	U		0.059	U		0.15	U	
Acetone	NV	NV	NV	NV	NV	5.74			4.55	J		0.193	U		0.193	U		0.193	U		0.193	U		0.193	U	
Benzene	10	5	NV	NV	NV	1.25	J	J	0.534	J	J	0.111	U		0.111	U		0.111	U		0.111	U		0.111	U	
Ethylbenzene	750	700	NV	NV	NV	0.785	J	J	0.276	J	J	0.109	U		0.109	U		0.109	U		0.109	U		0.109	U	
Isopropylbenzene (Cumene)	NV	NV	NV	NV	NV	0.13	U		0.13	U		0.13	U		0.13	U		0.13	U		0.13	U		0.13	U	
n-Propylbenzene	NV	NV	NV	NV	NV	0.727	U		0.727	U		0.727	U		0.727	U		0.727	U		0.727	U		0.727	U	
sec-Butylbenzene	NV	NV	NV	NV	NV	0.341	J		0.370	J		0.107	U		0.107	U		0.107	U		0.107	U		0.107	U	
tert-Butylbenzene	NV	NV	NV	NV	NV	0.832	J		0.837	J		0.087	U		0.087	U		0.087	U		0.087	U		0.087	U	
Dissolved TAL Metals Analysis (6010C)	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L		
Antimony	NV	6	6	10	NV	0.15	U		0.15	U		0.015	U		0.15	U		0.015	U		0.015	U		0.15	U	
Arsenic	100	10	10	28.53	NV	0.050	U		0.050	U		**0.014**	J		0.050	U		0.0074	J		0.005	U		**0.072**	J	
Barium	1,000	2,000	30.2	30.13	NV	0.025	U		0.025	U		0.015			0.025	U		0.011			0.019			0.025	U	
Calcium	NV	NV	1,151,302	1,151,301.20	NV	490			477			593			540			489			616			494		
Chromium	50	100	3	2.50	NV	0.025	U		0.025	U		0.029			0.025	U		0.015			0.0025	U		0.025	U	
Cobalt	50	NV	2.6	2.60	NV	0.025	U		0.025	U		0.0042	J		0.025	U		0.0034	J		0.0041	J		0.0025	U	
Copper	1,000	1,300	22	57.46	NV	0.05	U		0.05	U		0.021			0.05	U		0.005	U		0.005	U		0.26		
Iron	1,000	300 [6]	65.6	65.56	NV	**8.10**			**7.97**			**1.15**			0.05	U		0.05	U		**1.31**			0.05	U	
Lead	50	15	9	9.00	NV	0.038U	U		0.038	U		0.0038	U		0.038	U		0.0038	U		0.0062	J		0.038	U	
Magnesium	NV	NV	3,630,927	3,630,926.70	NV	597			593			167			719			280			49.3			838		
Manganese	200	50 [6]	50	118.65	NV	**2.59**			**2.62**			**1.62**			0.038	U		0.0044	J		**0.13**			0.038	U	
Potassium	NV	NV	120,480	120,479.98	NV	5.08			4.48	J		4.06			16.6			18.4			7.21			23.5		
Silver	50	100 [6]	10	10.00	NV	0.025	U		0.043	J		0.0025	U		0.03	J		0.0025	U		0.0025	U		0.025	U	
Sodium	NV	NV	19,972,499	19,972,499.00	NV	1830			1770			163			2660			512			22.2			4560		
Thallium	NV	2	2	15.00	NV	0.05	U		0.05	U		0.012	J		0.005	U		0.005	U		0.005	U		0.05	U	
Vanadium	NV	NV	73.8	73.73	NV	0.092	J		0.11	J		0.021			0.16	J		0.047			0.013	J		0.55		
Zinc	10,000	5,000	23.0	56.28	NV	0.052	J		0.05	U		0.005	U		0.05	U		0.005	U		0.005	U		0.16	J	
Mercury	2	2	0.5	NV	0.44	0.000070	U		0.000070	U		0.000070	U		0.000070	U		0.000070	U		0.000070	U		0.000070	U	
Total TAL Metals Analysis (7470A)	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L		
Mercury	2	2	0.5	NV	0.44	0.000070	U		0.000070	U		0.000070	U		0.000070	U		0.000070	U		0.000070	U		0.000070	U	
General Chemistry	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L		
Nitrate (USEPA 300.0)	10	10	NV	NV	NV	0.500	U		0.500	U		0.25	U		**11.6**			3.90			0.100	U		**16.7**		
Solids, Total Dissolved (SM 2540 C)	1,000	500 [6]	NV	NV	65,956.58	**5710**			**5610**			**2990**			**16400**			**3080**			**2510**			**17600**		

Notes:
NMWQCC = New Mexico Water Quality Control Commission
USEPA = United States Environmetal Protection Agency
MCL = Maximum Contaminant Level
NMED = New Mexico Environmental Department
UTL = Upper Tolerance Limit
TAL = Total Analyte List
µg/L = micrograms per liter
mg/L = milligrams per liter
NV = No Value
Q = Laboratory Qualifier
Q1 = Validating Chemist Qualifier

Qualifiers
U = Not detected
J = Indicates an estimated value

Sample Identification Nomenclature
MW = Monitoring Well Sample
08 = Site identifier for SD-08
A = Sample suffix denoting a duplicate sample

[1] Standards for Groundwater, if 10,000 mg/l TDS Concentration or Less, New Mexico Administrative Code 20.6.2.3103
[2] USEPA National Primary Drinking Water Regulations MCLs (816-F-09-004, May 2009)
[3] Table 3, Conditional Approval Letter, Basewide Background Study Report, Holloman Air Force Base, New Mexico (NMED, December 2011)
[4] Table 5-18, *Basewide Background Study Report, Holloman Air Force Base, New Mexico* (NationView/Bhate JV III, July 2011)
[5] If results are not detected (U) then the value is set at the Method Detection Limit (MDL)
[6] USEPA Secondary Drinking Water Standard (816-F-09-004, May 2009)
Bold value indicates analytes above the New Mexico Groundwater Quality Standards, the USEPA MCLs, or the NMED TPH Screening Guidelines
Indicates analytical results above the NMED Approved Background Level, but below the New Mexico Groundwater Quality Standard and USEPA MCL

Table 5-1
Groundwater Analytical Data (November 2013)
Building 131 Washrack (SD-08)
Holloman Air Force Base, New Mexico
NationView Project No. 10-0004

Client Sample Identification:	Groundwater Screening Levels		Basewide Background			MW-08-07			MW-08-08			SD08-MW10			SD08-MW11			SD08-MW12			SD08-MW13			SD08-MW13A		
Lab Sample Identification:	NMWQCC[1]	USEPA MCL [2]	NMED Approved Background Levels [3]	Dissolved Metals in Groundwater UTL [4]	Total Metals in Groundwater UTL [4]	21311080901			21311070905			21311070904			21311070903			21311061104			21311061102			21311061103		
Date Sampled:						11/6/2013			11/6/2013			11/6/2013			11/6/2013			11/4/2013			11/4/2013			11/4/2013		
Analyte						Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1
Volatile Organic Compounds (8260B)	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
1,2-Dichlorobenzene	NV	600	NV	NV	NV	0.135	U		0.135	U		0.138	U		0.135	U		0.135	U		0.135	U		0.135	U	
1,2-Dichloroethane	10	5	NV	NV	NV	**30.5**			0.116	U		0.116	U		**77.3**			0.116	U		0.116	U		0.116	U	
1,2-Dichloropropane	NV	5	NV	NV	NV	0.809	J		0.15	U		0.15	U		4.73	J		0.15	U		0.15	U		0.15	U	
Acetone	NV	NV	NV	NV	NV	0.193	U		0.193	U		0.193	U		0.193	U		0.193	U		0.193	U		0.193	U	
Benzene	10	5	NV	NV	NV	0.111	U		1.23	J		**62.9**			1.38	J		0.111	U		0.111	U		0.111	U	
Ethylbenzene	750	700	NV	NV	NV	0.109	U		0.109	U		1.94	J		0.109	U		0.109	U		0.109	U		0.109	U	
Isopropylbenzene (Cumene)	NV	NV	NV	NV	NV	0.13	U		0.13	U		14.3			1.38	J		0.13	U		0.13	U		0.13	U	
n-Propylbenzene	NV	NV	NV	NV	NV	0.727	U		0.727	U		30.6			0.727	U		0.727	U		0.727	U		0.727	U	
sec-Butylbenzene	NV	NV	NV	NV	NV	0.107	U		0.107	U		2.83	J		1.00	J		0.107	U		0.107	U		0.107	U	
tert-Butylbenzene	NV	NV	NV	NV	NV	0.087	U		0.087	U		0.087	U		0.087	U		0.087	U		0.087	U		0.087	U	
Dissolved TAL Metals Analysis (6010C)	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L		
Antimony	NV	6	6	10	NV	0.015	U		0.15	U		0.015	U		0.15	U		0.15	U		0.15	U		0.15	U	
Arsenic	100	10	10	28.53	NV	**0.040**			0.050	U		**0.035**			0.050	U		0.050	U		0.050	U		0.050	U	
Barium	1,000	2,000	30.2	30.13	NV	0.012			0.025	U		0.023			0.026	J		0.025	U		0.025	U		0.025	U	
Calcium	NV	NV	1,151,302	1,151,301.20	NV	575			708			505			487			593			655			674		
Chromium	50	100	3	2.50	NV	0.028			0.025	U		0.024			0.025	U		0.025	U		0.025	U		0.025	U	
Cobalt	50	NV	2.6	2.60	NV	0.0035	J		0.025	U		0.0057	J		0.025	U		0.025	U		0.025	U		0.025	U	
Copper	1,000	1,300	22	57.46	NV	0.021			0.05	U		0.022			0.05	U		0.37			0.35			0.32		
Iron	1,000	300 [6]	65.6	65.56	NV	0.067	J		0.50	U		**1.27**			0.50	U		0.50	U		0.50	U		0.50	U	
Lead	50	15	9	9.00	NV	0.0038	U		0.038	U		0.0038	U		0.04	J		0.038	U		0.038	U		0.038	U	
Magnesium	NV	NV	3,630,927	3,630,926.70	NV	195			1210			259			875			2890			2200			2270		
Manganese	200	50 [6]	50	118.65	NV	**1.35**			**0.89**			**2.57**			**2.30**			**0.066**	J		0.038	U		0.038	U	
Potassium	NV	NV	120,480	120,479.98	NV	5.57			49.9			5.77			23.4			85.1			67.0			68.6		
Silver	50	100 [6]	10	10.00	NV	0.0025	U		0.035	J		0.0025	U		0.04	J		0.025	U		0.025	U		0.025	U	
Sodium	NV	NV	19,972,499	19,972,499.00	NV	440			5200			226			4670			15300			10600			10500		
Thallium	NV	2	2	15.00	NV	0.014	J		0.05	U		0.011	J		0.05	U		0.05	U		0.050	U		0.050	U	
Vanadium	NV	NV	73.8	73.73	NV	0.039			0.15	J		0.018	J		0.13	J		0.60			0.63			0.63		
Zinc	10,000	5,000	23.0	56.28	NV	0.005	U		0.05	U		0.005	U		0.05	U		0.05	U		0.05	U		0.05	U	
Mercury	2	2	0.5	NV	0.44	0.000070	U		0.000070	U		0.000070	U		0.000070	U		0.000070	U		0.000070	U		0.000070	U	
Total TAL Metals Analysis (7470A)	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L		
Mercury	2	2	0.5	NV	0.44	0.000070	U		0.000070	U		0.000070	U		0.000070	J		0.000070	U		0.000070	U		0.000070	U	
General Chemistry	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L		
Nitrate (USEPA 300.0)	10	10	NV	NV	NV	1.49			**14.1**			0.25	U		2.5	U		**21.7**		J	**12.9**		J	**11.9**		J
Solids, Total Dissolved (SM 2540 C)	1,000	500 [6]	NV	NV	65,956.58	**3080**			**22600**			**2210**			**19400**			**59200**			**33500**			**37200**		

Notes:

NMWQCC = New Mexico Water Quality Control Commission
USEPA = United States Environmetal Protection Agency
MCL = Maximum Contaminant Level
NMED = New Mexico Environmental Department
UTL = Upper Tolerance Limit
TAL = Total Analyte List
µg/L = micrograms per liter
mg/L = milligrams per liter
NV = No Value
Q = Laboratory Qualifier
Q1 = Validating Chemist Qualifier

Qualifiers
U = Not detected
J = Indicates an estimated value

Sample Identification Nomenclature
MW = Monitoring Well Sample
08 = Site identifier for SD-08
A = Sample suffix denoting a duplicate sample

[1] Standards for Groundwater, if 10,000 mg/l TDS Concentration or Less, New Mexico Administrative Code 20.6.2.3103
[2] USEPA National Primary Drinking Water Regulations MCLs (816-F-09-004, May 2009)
[3] Table 3, Conditional Approval Letter, Basewide Background Study Report, Holloman Air Force Base, New Mexico (NMED, December 2011)
[4] Table 5-18, *Basewide Background Study Report, Holloman Air Force Base, New Mexico* (NationView/Bhate JV III, July 2011)
[5] If results are not detected (U) then the value is set at the Method Detection Limit (MDL)
[6] USEPA Secondary Drinking Water Standard (816-F-09-004, May 2009)
Bold value indicates analytes above the New Mexico Groundwater Quality Standards, the USEPA MCLs, or the NMED TPH Screening Guidelines
Indicates analytical results above the NMED Approved Background Level, but below the New Mexico Groundwater Quality Standard and USEPA MCL

Table 5-1
Groundwater Analytical Data (November 2013)
Building 131 Washrack (SD-08)
Holloman Air Force Base, New Mexico
NationView Project No. 10-0004

Client Sample Identification:	Groundwater Screening Levels		Basewide Background			S10-MW01			S10-MW02			S10-MW06			SWMU183-MW03		
Lab Sample Identification:	NMWQCC[1]	USEPA MCL [2]	NMED Approved Background Levels [3]	Dissolved Metals in Groundwater UTL [4]	Total Metals in Groundwater UTL [4]	21311061110			21311070902			21311061101			21311070901		
Date Sampled:						11/5/2013			11/6/2013			11/4/2013			11/5/2013		
Analyte						Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1
Volatile Organic Compounds (8260B)	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**			**µg/L**			**µg/L**			**µg/L**		
1,2-Dichlorobenzene	NV	600	NV	NV	NV	0.135	U		0.135	U		0.135	U		0.138	U	
1,2-Dichloroethane	10	5	NV	NV	NV	**22**			0.116	U		0.116	U		0.116	U	
1,2-Dichloropropane	NV	5	NV	NV	NV	0.15	U		0.15	U		0.15	U		0.15	U	
Acetone	NV	NV	NV	NV	NV	0.193	U		0.193	U		0.193	U		0.193	U	
Benzene	10	5	NV	NV	NV	0.111	U		0.111	U		0.111	U		1.28	J	
Ethylbenzene	750	700	NV	NV	NV	0.109	U		0.109	U		0.109	U		0.109	U	
Isopropylbenzene (Cumene)	NV	NV	NV	NV	NV	0.13	U		0.13	U		0.13	U		0.13	U	
n-Propylbenzene	NV	NV	NV	NV	NV	0.727	U		0.727	U		0.727	U		0.727	U	
sec-Butylbenzene	NV	NV	NV	NV	NV	0.107	U		0.107	U		0.107	U		1.75	J	
tert-Butylbenzene	NV	NV	NV	NV	NV	0.087	U		0.087	U		0.087	U		0.087	U	
Dissolved TAL Metals Analysis (6010C)	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**mg/L**			**mg/L**			**mg/L**			**mg/L**		
Antimony	NV	6	6	10	NV	0.15	U		0.015	U		0.15	U		0.23	J	
Arsenic	100	10	10	28.53	NV	0.050	U		**0.013**	J		0.050	U		0.050	U	
Barium	1,000	2,000	30.2	30.13	NV	0.025	U		0.011			0.025	U		0.025	U	
Calcium	NV	NV	1,151,302	1,151,301.20	NV	488			533			435			499		
Chromium	50	100	3	2.50	NV	0.025	U		0.027			0.025	U		0.025	U	
Cobalt	50	NV	2.6	2.60	NV	0.025	U		0.0025	U		0.025	U		0.025	U	
Copper	1,000	1,300	22	57.46	NV	0.21			0.021			0.18	J		0.05	U	
Iron	1,000	300 [6]	65.6	65.56	NV	0.5	U		0.05	U		0.50	U		0.5	U	
Lead	50	15	9	9.00	NV	0.038	U		0.0038	U		0.038	U		0.038	U	
Magnesium	NV	NV	3,630,927	3,630,926.70	NV	528			194			598			237		
Manganese	200	50 [6]	50	118.65	NV	**0.28**			0.0038	U		**0.15**			**0.92**		
Potassium	NV	NV	120,480	120,479.98	NV	16.4			22.6			32.5			6.68		
Silver	50	100 [6]	10	10.00	NV	0.025	U		0.0025	U		0.025	U		0.047	J	
Sodium	NV	NV	19,972,499	19,972,499.00	NV	2580			65.2			3320			962		
Thallium	NV	2	2	15.00	NV	0.05	U		0.0083	J		0.05	U		0.05	U	
Vanadium	NV	NV	73.8	73.73	NV	0.53			0.075			0.49			0.094	J	
Zinc	10,000	5,000	23.0	56.28	NV	0.05	U		0.005	U		0.05	U		0.05	U	
Mercury	2	2	0.5	NV	0.44	0.000070	U		0.000070	U		0.000070	U		0.000070	U	
Total TAL Metals Analysis (7470A)	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**mg/L**			**mg/L**			**mg/L**			**mg/L**		
Mercury	2	2	0.5	NV	0.44	0.000070	U		0.000070	U		0.000070	U		0.000070	U	
General Chemistry	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**			**mg/L**			**mg/L**			**mg/L**		
Nitrate (USEPA 300.0)	10	10	NV	NV	NV	5.62			**16.8**			**43.2**		J	**23.0**		J
Solids, Total Dissolved (SM 2540 C)	1,000	500 [6]	NV	NV	65,956.58	**11000**			**3260**			**15400**			**3740**		

Notes:

NMWQCC = New Mexico Water Quality Control Commission
USEPA = United States Environmetal Protection Agency
MCL = Maximum Contaminant Level
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UTL = Upper Tolerance Limit
TAL = Total Analyte List
µg/L = micrograms per liter
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Q1 = Validating Chemist Qualifier

Qualifiers
U = Not detected
J = Indicates an estimated value

Sample Identification Nomenclature
MW = Monitoring Well Sample
08 = Site identifier for SD-08
A = Sample suffix denoting a duplicate sample

[1] Standards for Groundwater, if 10,000 mg/l TDS Concentration or Less, New Mexico Administrative Code 20.6.2.3103
[2] USEPA National Primary Drinking Water Regulations MCLs (816-F-09-004, May 2009)
[3] Table 3, Conditional Approval Letter, Basewide Background Study Report, Holloman Air Force Base, New Mexico (NMED, December 2011)
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Bold value indicates analytes above the New Mexico Groundwater Quality Standards, the USEPA MCLs, or the NMED TPH Screening Guidelines
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Table 6-1
Summary of Selected SD-08 Groundawater Analytical Results Above Action Levels (Jan 2012 - Nov 2013)
Building 131 Washrack (SD-08)
Holloman Air Force Base, New Mexico
NationView Project No. 10-0004

		VOCs (µg/L)			Dissolved TAL Metals (µg/L)			General Chemistry (mg/L)				
Monitoring Well	Date Sampled	1,2-Dichloroethane	1,2-Dichloropropane	Benzene	Arsenic	Iron	Manganese	Chloride	Flouride	Nitrate	Sulfate	TDS
MW-08-01	1/26/12	44.4	6.49	ND	5.2 J	7,560 [1]	2,600 [1]	627 [1]	5.78 [1]	ND	6,260 [1]	9,720 [1]
	4/25/12	28.3	5.62 [1]	ND	ND	5,340 [1]	1,850	NS	NS	NS	NS	10,700 [1]
	7/23/12	16.3	2.98 J	ND	3.7 J	5,170	1,710	519	5.41	ND	5,540	9,140
	10/23/12	29.3	5.58	ND	ND	5,520	1,660	563	3.38	ND	5,780	9,750
	1/22/13	23.8	4.97 J	ND	ND	6,070	1,840	556	3.28	ND	5,470	8,170
	4/8/13	27.9 [1]	5.79 [1]	ND	16 J [1]	7,620 [1]	2,390	NS	NS	ND	NS	24,440 [1]
	7/29/13	45.4	6.72	0.778 J	ND	7,110	2,470	NS	NS	ND	NS	9,100
	11/7/13	26.1	5.25	1.25 J	ND	8,100	2,590	NS	NS	ND	NS	5,710
MW-08-02	1/26/12	7.82	0.114	ND	26	520	1,030	73.1	7.31	0.09	2,160	3,270
	4/25/12	11.2	ND	ND	13 J	330	800	NS	NS	NS	NS	3,510
	7/23/12	4.98 J	ND	ND	30	1,530	2,190	119	4.12	ND	1,960	3,450
	10/23/12	14.5	ND	ND	40	920	1,150	101	3.53	ND	1,890	3,430
	1/22/13	63.9	1.38 J	ND	ND	660	1,020	116	3.94	0.132 J	1,940	3,510
	4/8/13	5.37	ND	ND	33 [1]	777	1,190	NS	NS	ND	NS	3,770
	7/29/13	10.8	ND	ND	ND	900	3,780	NS	NS	ND	NS	3,710
	11/6/13	4.02 J	ND	ND	14 J	1,150	1,620	NS	NS	ND	NS	2,990
MW-08-03	1/25/12	ND	ND	ND	14	ND	ND	4,030	2.95	16.6	4,890	11,800
	4/25/12	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	12,300
	7/23/12	ND	ND	ND	22	ND	ND	4,100	2.21	11.7	5,060	13,200
	10/23/12	ND	ND	ND	19	ND	ND	5,180	3.11 J	12.3	5,970	13,400
	1/21/13	ND	ND	ND	ND	ND	ND	4,150	1.51 J	14.2	4,960	14,100
	4/8/13	ND	ND	ND	ND	ND	ND	NS	NS	20 J	NS	25,500
	7/29/13	ND	ND	ND	ND	ND	ND	NS	NS	10.8	NS	11,700
	11/7/13	ND	ND	ND	ND	ND	ND	NS	NS	11.6	NS	16,400

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Building 131 Washrack (SD-08)
Holloman Air Force Base, New Mexico
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		VOCs (µg/L)			Dissolved TAL Metals (µg/L)			General Chemistry (mg/L)				
Monitoring Well	**Date Sampled**	**1,2-Dichloroethane**	**1,2-Dichloropropane**	**Benzene**	**Arsenic**	**Iron**	**Manganese**	**Chloride**	**Flouride**	**Nitrate**	**Sulfate**	**TDS**
MW-08-04	1/25/12	ND	ND	ND	ND	ND	ND	**477**	**2.26**	4.97	**3,550**	**5,060**
	4/24/12	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	**6,060**
	7/23/12	ND	ND	ND	9.2 J	ND	ND	**457**	1.26	4.18 J	**2,950**	**5,110**
	10/23/12	ND	ND	ND	3.9 J	ND	ND	**513**	0.901 J	4.19 J	**3,130**	**5,310**
	1/21/13	ND	ND	ND	ND	ND	ND	**583**	1.02	6.2	**2,690**	**3,280**
	4/8/13	ND	ND	ND	**13 J**	ND	ND	NS	NS	5.82	NS	**5,210**
	7/23/13	ND	ND	ND	ND	ND	**292**	NS	NS	6.10	NS	**5,590**
	11/5/13	ND	ND	ND	7.4 J	ND	4.4 J	NS	NS	3.90	NS	**3,080**
MW-08-05	1/25/12	ND	ND	ND	5.8 J	74 J	33	27.7	**5.35**	0.787	**1,800**	**2,580**
	4/24/12	4.61 J	ND	ND	ND	ND	24	NS	NS	NS	NS	**2,850**
	7/24/12	ND	ND	ND	ND	ND	36	34.2	**4.55**	0.434 J	**1,590**	**2,700**
	10/23/12	ND	ND	ND	**15**	ND	23	22.6	**4.19**	ND	**1,640**	**2,930**
	1/21/13	ND	ND	ND	ND	ND	**56 J**	59	**5.03**	0.321 J	**1,630**	**2,270**
	4/9/13	2.34 J	ND	ND	**11 J**	ND	**130**	NS	NS	ND	NS	**2,890**
	7/23/13	ND	ND	ND	ND	ND	16	NS	NS	0.351 J	NS	**2,950**
	11/5/13	ND	ND	ND	ND	**1,310**	**130**	NS	NS	ND	NS	**2,510**
MW-08-06	1/24/12	ND	ND	ND	**12**	ND	ND	**6710**	**3.09**	**19.4**	**8,170**	**19,900**
	4/24/12	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	**19,400**
	7/23/12	ND	ND	ND	**22**	ND	ND	**6240**	1.14	**15.9**	**7,970**	**19,900**
	10/23/12	ND	ND	ND	**13**	ND	ND	**5,860**	0.465 J	**15.2**	**7,070**	**19,800**
	1/21/13	ND	ND	ND	ND	ND	ND	**5,320**	ND	**19**	**5,390**	**21,800**
	4/8/13	ND	ND	ND	**23**	ND	ND	NS	NS	**18.4**	NS	**23,800**
	7/22/13	ND	ND	ND	ND	ND	ND	NS	NS	**13.2 J**	NS	**25,300**
	11/5/13	ND	ND	ND	**72 J**	ND	ND	NS	NS	**16.7**	NS	**17,600**

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Building 131 Washrack (SD-08)
Holloman Air Force Base, New Mexico
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		VOCs (µg/L)			Dissolved TAL Metals (µg/L)			General Chemistry (mg/L)				
Monitoring Well	**Date Sampled**	**1,2-Dichloroethane**	**1,2-Dichloropropane**	**Benzene**	**Arsenic**	**Iron**	**Manganese**	**Chloride**	**Flouride**	**Nitrate**	**Sulfate**	**TDS**
MW-08-07	1/26/12	**34.3**	0.783 J	ND	**48**	ND	**1,330**	436	**4.66**	2.36 J	**2,230**	**3,840**
	4/25/12	**52.5**	0.915 J	ND	**29**	ND	**1,370**	NS	NS	NS	NS	**4,020**
	7/23/12	**81.5**	1.3 J	ND	**53**	ND	**1,530**	**452** [1]	**3.35** [1]	1.26 J [1]	**2,270** [1]	**4,360** [1]
	10/23/12	**69.6**	1.65 J	ND	**69** [1]	ND	**1,510** [1]	**485**	**2.94** [1]	0.765 J [1]	**2,300**	**4,780**
	1/22/13	**49.2** [1]	1.19 J [1]	ND	ND	ND	**1,390**	**413**	**2.83** [1]	1.47 J [1]	**2,150**	**4,460**
	4/8/13	**89.2**	ND	ND	**56**	ND	**1,500**	NS	NS	0.638 J	NS	**4,530**
	7/29/13	**39.9**	1.12 J	ND	**25**	ND	**1,160**	NS	NS	1.69 J	NS	**4,180**
	11/6/13	**30.5**	0.809 J	ND	**40**	ND	**1,350**	NS	NS	1.49	NS	**3,080**
MW-08-08	1/25/12	ND	ND	ND	**10 J**	ND	**240**	**13,500**	ND	**37.8**	**8,900**	**33,600**
	4/24/12	ND	ND	ND	ND	ND	**220**	NS	NS	NS	NS	**29,300**
	7/24/12	ND	ND	ND	ND	ND	**79**	**12,400**	ND	**25.8**	**8,070**	**30,700**
	10/22/12	ND	ND	ND	**45 J**	ND	41 J	**12,300**	ND	**24.4 J**	**7,540**	**31,800**
	1/21/13	ND	ND	ND	ND	ND	**90**	**10,300**	ND	**33**	**6,390**	**31,600**
	4/8/13	ND	ND	ND	ND	ND	ND	NS	NS	**38**	NS	**26,900**
	7/23/13	ND	ND	ND	ND	ND	**95**	NS	NS	**15.9 J**	NS	**39,500**
	11/6/13	ND	ND	1.23 J	ND	ND	**890**	NS	NS	**14.1**	NS	**22,600**
SD08-MW10	7/31/13	ND	ND	**58.4**	**43**	**540**	**2,130**	NS	NS	ND	NS	**4,210**
	11/6/13	ND	ND	**62.9**	**35**	**1,270**	**2,570**	NS	NS	ND	NS	**2,210**
SD08-MW11	7/31/13	**80.5**	**5.37**	ND	ND	ND	**2,570**	NS	NS	ND	NS	**24,000**
	11/6/13	**77.3**	4.73 J	1.38 J	ND	ND	**2,300**	NS	NS	2.5	NS	**19,400**
SD08-MW12	7/22/13	ND	ND	ND	**64 J**	ND	**69 J**	NS	NS	4.95 J	NS	**69,700**
	11/4/13	ND	ND	ND	ND	ND	**66 J**	NS	NS	**21.7**	NS	**59,200**
SD08-MW13	7/31/13	ND	ND	ND	ND	ND	ND	NS	NS	9.74 J	NS	**39,800**
	11/4/13	ND	ND	ND	ND	ND	ND	NS	NS	**12.9**	NS	**33,500**

Table 6-1
Summary of Selected SD-08 Groundawater Analytical Results Above Action Levels (Jan 2012 - Nov 2013)
Building 131 Washrack (SD-08)
Holloman Air Force Base, New Mexico
NationView Project No. 10-0004

		VOCs (µg/L)			Dissolved TAL Metals (µg/L)			General Chemistry (mg/L)				
Monitoring Well	**Date Sampled**	**1,2-Dichloroethane**	**1,2-Dichloropropane**	**Benzene**	**Arsenic**	**Iron**	**Manganese**	**Chloride**	**Flouride**	**Nitrate**	**Sulfate**	**TDS**
S10-MW01	4/25/12	**15.2**	ND	ND	ND	ND	**240**	**3,330**	**3.34**	5.42	**5,940**	**12,900**
	7/24/12	**17.4**	ND	ND	8.7 J	ND	**210**	**3860**	**2.81**	4.44 J	**6,190**	**14,600**
	10/24/12	**15.6**	0.582 J	ND	**22** [1]	ND	**210**	**4,180** [1]	1.83 J	4.48 J [1]	**6,010** [1]	**15,700** [1]
	1/22/13	**13.5** [1]	ND	ND	ND	ND	**260** [1]	**2390**	**2.49**	5.06 J [1]	**4,950**	**10,800**
	4/9/13	**16**	ND	ND	**31**	ND	**350**	NS	NS	3.79 J	NS	**9,600**
	7/23/13	**13**	0.269 J	ND	ND	ND	**160**	NS	NS	4.10 J	NS	**13,700**
	11/5/13	**22**	ND	ND	ND	ND	**280**	NS	NS	5.62	NS	**11,000**
S10-MW02	4/9/13	ND	ND	ND	**16 J**	ND	ND	NS	NS	**13**	NS	**3,590**
	7/31/13	ND	ND	ND	**7.1 J**	ND	ND	NS	NS	**10.7**	NS	**3,760**
	11/6/13	ND	ND	ND	**13 J**	ND	ND	NS	NS	**16.8**	NS	**3,260**
S10-MW06	7/24/12	ND	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS
	10/23/12	ND	ND	ND	**21**	ND	**70**	**2,280**	0.638 J	**47.1**	**6,860**	**14,700**
	1/21/13	ND	ND	ND	ND	ND	**84**	**2,430**	1.23 J	**47.5**	**7,320**	**15,300**
	4/9/13	ND	ND	ND	**28**	ND	**59**	NS	NS	**49.3**	NS	**14,900**
	7/22/13	ND	ND	ND	ND	ND	**190**	NS	NS	**46.7**	NS	**15,000**
	11/4/13	ND	ND	ND	ND	ND	**150**	NS	NS	**43.2**	NS	**15,400**
SWMU183-MW03	4/25/12	ND	ND	ND	ND	ND	**820**	**930**	1.67	**64.2**	**2780**	**5,400**
	7/24/12	ND	ND	ND	ND	ND	**790**	**907**	1.44	**55.9**	**2780**	**5,520**
	10/23/12	ND	ND	ND	**12**	ND	**800**	**1,010**	1.44 J	**47.9**	**2,960**	**6,330**
	1/21/13	ND	ND	ND	ND	ND	**670**	**929**	**1.69 J**	**34**	**3,170**	**3,730**
	4/9/13	ND	ND	ND	**16 J**	ND	**700**	NS	NS	**36.1**	NS	**6,120**
	7/29/13	ND	ND	ND	ND	ND	**1,130**	NS	NS	**24.2**	NS	**6,430**
	11/5/13	ND	ND	1.28 J	ND	ND	**920**	NS	NS	**23.0**	NS	**3,740**

Notes:
mg/L = milligrams per liter
µg/L = micrograms per liter
J = Indicates an estimated value
NS = Not Sampled
ND = Not detected
VOC = Volatile Organic Compounds
Table presents metals that are considered contaminants of concern
[1] Duplicate Result

TDS = Total Dissolved Solids
USEPA = U.S. Environmental Protection Agency
MCL = Maximum Contaminant Level
NMED = New Mexico Environment Department
TPH = Total Petroleum Hydrocarbons

Bold value indicates analytes above the New Mexico Groundwater Quality Standards, the USEPA MCLs, or the NMED TPH Screening Guidelines

Indicates analytical results above the New Mexico Groundwater Quality Standard, or USEPA MCL, but below the NMED approved Basewide Background Level

ATTACHMENT 1

NMED Notice of Approval Letter, Request to Perform Eight Quarters of Groundwater Monitoring, Site SD-08 (SWMU 82) Holloman AFB, EPA ID # NM6572124422, HWB-HAFB-07-007 (November 22, 2011)

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NEW MEXICO ENVIRONMENT DEPARTMENT

Hazardous Waste Bureau

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

SUSANA MARTINEZ
Governor

JOHN A. SANCHEZ
Lieutenant Governor

DAVE MARTIN
Cabinet Secretary

BUTCH TONGATE
Deputy Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

November 22, 2011

A. David Budak
Deputy Base Civil Engineer
550 Tabosa Ave.
Holloman AFB, NM 88330-5840

RE: NOTICE OF APROVAL
REQUEST TO PERFORM EIGHT QUARTERS OF GROUNDWATER MONITORING, SITE SD-08 (SWMU 82)
HOLLOMAN AIR FORCE BASE, EPA ID# NM6572124422
HWB-HAFB-07-007

Dear Mr. Budak:

The New Mexico Environment Department (NMED) has reviewed Holloman Air Force Base's November 2, 2011 request to perform eight quarters of groundwater monitoring at Site SD-08 (SWMU 82). The analytical parameters to be collected include Volatile Organic Compounds (VOCs), Target Analyte List (TAL) Metals, Nitrate and Total Dissolved Solids (TDS) from nine (9) existing monitoring wells at the site. A quarterly report is to be submitted to NMED following each sampling event.

Please be advised that the NMED hereby approves this request as proposed. As you know, NMED is presently reviewing a RCRA Facility Investigation Report for this site and is aware that there is petroleum hydrocarbon (TRPH) contamination in the soil above target levels and 1,2-Dichloroethane (1,2-DCA) contamination in groundwater above cleanup standards. A risk assessment in this report concludes that the presence of these contaminants does not present a risk to unrestricted future use of the site. Therefore, the proposed monitoring is anticipated to support this conclusion.

If you have any questions regarding this letter, please contact David Strasser of my staff at (505) 222-9526.

Sincerely,

John E. Kieling
Acting Chief
Hazardous Waste Bureau

cc: W. Moats, NMED HWB
C. Amindyas, NMED HWB
D. Strasser, NMED HWB
L. King, EPA-Region 6 (6PD-N)
File: HAFB 2011 and Reading
HWB-HAFB-07-007

APPENDIX A

Portions of the Draft Final Investigation Report, Waste Sites SS-06, SD-15, AOC-RR and AOC-BBMS

Holloman Air Force Base, New Mexico

Ebasco Services Inc. and Groundwater Technology Government Services Inc., October 1995

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DRAFT FINAL
SITE INVESTIGATION REPORT
WASTE SITES SS-06, SD-15, AOC-RR, AND AOC-BBMS
HOLLOMAN AIR FORCE BASE, NEW MEXICO

Prepared for:

49 CES/CEVR
Holloman Air Force Base, NM

and

HQ ACC/ESVR
Langley Air Force Base, VA

Prepared by:

Ebasco Services, Inc. dba
Foster Wheeler Environmental Corporation
143 Union Blvd., Suite 1010
Lakewood, Colorado 80228-1824

and

Groundwater Technology
Government Services, Inc.
2501 Yale Blvd., S.E.
Albuquerque, New Mexico 87106

Under Contract No. DACW-45-94-D-0003

Delivery Order 1, Work Authorization Directives 3, 5, 9

U.S. Army Corps of Engineers
Omaha District
Omaha, Nebraska

October 1995

HAFB-03\SI-TEXT.RPT

AOC-RR

Area of Concern - Railroad Building

TABLE 3-1
SOIL VAPOR SURVEY RESULTS AT AOC-RR"
RAILROAD BUILDING 80
HOLLOMAN AFB, NM
MARCH 1995

Sample No.	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	Total BTEX (ug/l)	TPH (ug/l)
AOC-RR-SG-01	0.10	0.24	0.06	0.26	0.66	<20
AOC-RR-SG-02	0.05	0.26	0.08	0.34	0.73	<20
AOC-RR-SG-03	<0.05	0.15	0.05	0.22	0.42	<20
AOC-RR-SG-04	<0.05	0.20	<0.05	0.19	0.39	<20
AOC-RR-SG-05	0.07	0.21	0.07	0.27	0.55	<20
AOC-RR-SG-06	0.07	0.24	0.07	0.28	0.66	<20
AOC-RR-SG-07	0.10	0.25	0.07	0.27	0.69	<20
AOC-RR-SG-08	0.07	0.18	0.06	0.24	0.55	<20
AOC-RR-SG-09	0.09	0.19	0.07	0.27	0.62	<20
AOC-RR-SG-10	0.06	0.23	0.08	0.33	0.70	<20
AOC-RR-SG-11	<0.05	0.17	0.06	0.23	0.46	<20
AOC-RR-SG-11DUP	0.06	0.19	<0.05	<0.05	0.25	<20
AOC-RR-SG-12	<0.05	0.17	0.05	0.21	0.43	<20
AOC-RR-SG-13	<0.05	0.14	0.06	0.19	0.39	<20
AOC-RR-SG-14	<0.05	0.21	0.07	0.29	0.57	<20
AOC-RR-SG-15	0.10	0.31	0.08	0.32	0.81	<20
AOC-RR-SG-16	0.58	0.51	0.10	0.31	1.50	<20
AOC-RR-SG-17	<0.05	0.11	<0.05	0.18	0.29	<20

TABLE 3-1 (Continued)
SOIL VAPOR SURVEY RESULTS AT AOC-RR
RAILROAD BUILDING 80
HOLLOMAN AFB, NM
MARCH 1995

Sample No.	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	Total BTEX (ug/l)	TPH (ug/l)
AOC-RR-SG-18	<0.05	0.13	<0.05	0.12	0.25	<20
AOC-RR-SG-19	<0.05	0.15	0.06	0.22	0.43	<20
AOC-RR-SG-20	<0.05	0.20	0.08	0.33	0.61	<20
AOC-RR-SG-21	<0.05	0.15	<0.05	0.22	0.37	<20
AOC-RR-SG-22	0.05	<0.05	0.14	0.19	0.38	<20
AOC-RR-SG-22DUP	<0.05	0.16	<0.05	0.21	0.37	<20
AOC-RR-SG-23	0.07	0.24	0.08	0.37	0.76	<20
AOC-RR-SG-EQUIP. BLANK (3/21/95)	<0.05	0.18	0.06	0.30	0.54	<20
AOC-RR-SG-24	<0.05	0.16	0.06	0.29	0.51	<20
AOC-RR-SG-25	<0.05	0.17	0.06	0.28	0.51	<20
AOC-RR-SG-26	0.08	0.40	0.15	0.71	1.34	<20
AOC-RR-SG-27	<0.05	0.14	<0.05	0.22	0.36	<20
AOC-RR-SG-28	<0.05	0.17	0.06	0.27	0.50	<20
AOC-RR-SG-29	<0.05	0.14	<0.05	0.20	0.34	<20
AOC-RR-SG-29DUP	0.05	0.16	<0.05	<0.05	0.21	<20

[a]Samples analyzed for BTEX and TPH by EPA Methods Modified 5030/8020 and 8015.
ug/l = Micrograms per liter.
TPH = Total Petroleum Hydrocarbons as JP-4.
< = Indicates compound not detected at the stated reporting limit.

TABLE 3-2
GEOTECHNICAL SOIL ANALYTICAL RESULTS AT AOC-RR
RAILROAD BUILDING 80
HOLLOMAN AFB, NM
MARCH 1995

SAMPLE NO.	DEPTH (FT)	USCS IDENT	MOISTURE CONTENT (%wt.)	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	MEDIAN GRAIN SIZE (mm)
AOC-RR-SB-01-6-8	6-8	ML	23.9	29	26	3	0.0128
AOC-RR-SB-02-8-10	8-10	SM/SC	21.5	-	NON-PLASTIC	-	0.0890
AOC-RR-SB-03-4-6	4-6	ML	20.8	32	25	7	0.0294
AOC-RR-SB-04-2-4	2-4	SM/SC	22.5	-	NON-PLASTIC	-	0.0075
AOC-RR-SB-05-6-8	6-8	ML	35.2	38	33	5	0.0053
AOC-RR-SB-06-6-8	6-8	ML	29.6	35	33	2	0.0062

- = Not measured
USCS = Unified Soil Classification System
%wt = Weight percent
FT = Feet
mm = Millimeter

TABLE 3-3
SUMMARY OF SOIL ANALYTICAL RESULTS AT AOC-RR
RAILROAD BUILDING 80
HOLLOMAN AFB, NM
MARCH - APRIL 1995

CONSTITUENTS	COMPARATIVE CONCENTRATIONS		AOC-RR-SB01-6-8	AOC-RR-SB01-10-12	AOC-RR-SB02-2-4	AOC-RR-SB02-2-4D	AOC-RR-SB02-8-10	AOC-RR-SB03-4-6	AOC-RR-SB03-8-10	AOC-RR-SB04-2-4
	Background[a]	Risk-based Levels[a]								
SAMPLE DEPTH (feet)	--	--	6-8	10-12	2-4	2-4	8-10	4-6	8-10	2-4
VOLATILE ORGANICS - METHOD 8240 (ug/kg)										
All Constituents	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND
TOTAL PETROLEUM HYDROCARBONS - METHOD 8015 (mg/kg)	N/A	1000[a]	<20	<20	<20	<20	<20	<20	<20	<20
TAL METALS - METHODS 6000s AND 7000s (mg/kg)										
Barium	84	72,000	<100	<100	<100	<100	<100	170	63	<100
Calcium	250,000	N/A	160,000	130,000	170,000	170,000	140,000	140,000	130,000	130,000
Chromium	6.61	1,000,000	<15	<15	<15	<15	<15	<15	6.6	<15
Copper	4.84	38,000	<12	<12	<12	<12	<12	<12	5.0	<12
Iron	6,362	N/A	9,100	7,600	2,500	2,600	3,400	5,400	6,300	3,700
Lead	-2.32	400[a]	7.5	3.9	2.0	1.8	1.4	3.2	3.0	2.9
Nickel	5.61	20,000	<20	<20	<20	<20	<20	<20	8	<20
Vanadium	15.46	7,200	<25	<25	<25	<25	<25	<25	17	<25
Zinc	20.25	310,000	30	32	19	20	31	25	19	27

TABLE 3-3 (Continued)
SUMMARY OF SOIL ANALYTICAL RESULTS AT AOC-RR
RAILROAD BUILDING 80
HOLLOMAN AFB, NM
MARCH - APRIL 1995

CONSTITUENTS	COMPARATIVE CONCENTRATIONS		AOC-RR-SB04-6-8	AOC-RR-SB05-2-4	AOC-RR-SB05-6-8	AOC-RR-SB06-2-4	AOC-RR-SB06-6-8
	Background[a]	Risk-based Levels[b]					
SAMPLE DEPTH (feet)	--	--	6-8	2-4	6-8	2-4	6-8
VOLATILE ORGANICS - METHOD 8240 (ug/kg)							
All Constituents	N/A	N/A	ND	ND	ND	ND	ND
TOTAL PETROLEUM HYDROCARBONS - METHOD 8015 (mg/kg)	N/A	1000[m]	<20	<20	<20	<20	<20
TAL METALS - METHODS 6000s AND 7000s (mg/kg)							
Barium	84	72,000	<100	<100	<100	280	<100
Calcium	250,000	N/A	120,000	220,000	300,000	180,000	190,000
Chromium	6.61	1,000,000	<15	<15	<15	<15	<15
Copper	4.84	38,000	<12	<12	<12	<12	<12
Iron	6,362	N/A	4,600	1,200	6,700	6,700	3,100
Lead	-2.32	400[n]	2.3	1.3	3.8	2.6	6.9
Nickel	5.61	20,000	<20	<20	<20	<20	<20
Vanadium	15.46	7,200	<25	<25	<25	<25	<25
Zinc	20.25	310,000	24	64	41	26	60

TABLE 3-3 (Continued)
SUMMARY OF SOIL ANALYTICAL RESULTS AT AOC-RR
RAILROAD BUILDING 80
HOLLOMAN AFB, NM
MARCH - APRIL 1995

[m] *Basewide Background Study Holloman AFB* (Radian, 1993).

[n] EPA Region III Risk-based levels (R.L. Smith, November 1994).

[o] NMED USTB Correspondence to Holloman AFB, dated November 2, 1992.

[q] EPA Action Level for residential exposure.

ND = No compounds detected for method specified.

ug/kg = Micrograms per kilogram

N/A = Not applicable/not established

NA = Not analyzed

mg/kg = Milligrams per kilogram

TAL = Target Analyte List

< = Indicates compound not detected at the stated reporting limit.

TABLE 3-4
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS AT AOC-RR
RAILROAD BUILDING 80
HOLLOMAN AFB, NM
APRIL 1995

ANALYTES	COMPARATIVE CONCENTRATIONS		AOC-RR-GP-01	AOC-RR-GP-02	AOC-RR-GP-03	AOC-RR-GP-04	AOC-RR-GP-05	AOC-RR-GP-05DUP	AOC-RR-GP-06	AOC-RR-GP-07	AOC-RR-GP-07D
	Background*	Risk-based									
VOLATILE ORGANICS - METHOD 8240 (ug/l)											
Benzene	N/A	0.36	3,000	<5	<5	<5	36	23	870	700	780
1,2-Dichloroethane	N/A	0.12	380	<5	<5	9	190	170	440	<50	51
1,2-Dichloropropane	N/A	0.16	<250	<5	<5	<5	20	16	<50	<50	<50
Ethylbenzene	N/A	1,300	260	<5	<5	24	30	18	1,000	<50	<50
Toluene	N/A	750	1,200	<5	<5	<5	8	5	90	<50	<50
Xylenes	N/A	12,000	1,200	<5	<5	<5	49	35	560	120	180
TAL METALS - METHODS 6000s and 7000s (ug/l)											
Aluminum	N/A	37,000	19,000	<10,000	<10,000	12,000	12,000	NA	22,000	44,000	NA
Lead	19.9	N/A	<4.0	<4.0	<4.0	<4.0	<4.0	NA	<4.0	46	NA
Manganese	N/A	180	4,200	<750	2,000	2,900	8,700	NA	3,300	<1,500	NA
Zinc	253	11,000	9,300	<1,000	1,400	4,800	3,100	NA	<1,000	<2,000	NA
pH - METHOD 150.1	N/A	6-9	7.45	7.72	7.63	7.67	7.29	NA	7.25	7.20	7.17

TABLE 3-4 (continued)
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS AT AOC-RR
RAILROAD BUILDING 80
HOLLOMAN AFB, NM
APRIL 1995

ANALYTES	COMPARATIVE CONCENTRATION		AOC-RR-GP-08	AOCRR-GP-09	AOCRR-GP-11	AOC-RR-GP-12	AOC-RR-GP-12D	AOC-RR-GP-13	AOC-RR-GP-14	AOC-RR-GP-15	AOC-RR-GP-16
	Background[a]	Risk-based Levels[b]									
VOLATILE ORGANICS - METHOD 8240 (ug/l)											
Benzene	N/A	0.36	<5	750	3,300	<1	<1	100	<1	<1	40
1,2-Dichloroethane	N/A	0.12	<5	85	280	<2	<2	<20	<2	<2	290
1,2-Dichloropropane	N/A	0.16	<5	<50	<250	<2	<2	<20	<2	<2	<4
Ethylbenzene	N/A	1,300	<5	<50	960	2	2	490	<1	<1	210
Toluene	N/A	750	<5	<50	<250	<5	<5	1,600	<5	<5	<10
Xylenes	N/A	12,000	<5	750	<250	5	6	3,200	3	<2	<4
TAL METALS - METHODS 6000s and 7000s (ug/l)											
Aluminum	N/A	37,000	53,000	38,000	<200	NA	NA	NA	NA	NA	NA
Lead	19.9	N/A	<20	<20	<20	NA	NA	NA	NA	NA	NA
Manganese	N/A	180	<1,500	<1,500	1,900	NA	NA	NA	NA	NA	NA
Zinc	253	11,000	<2000	<2,000	<20	NA	NA	NA	NA	NA	NA
pH - METHOD 150.1	N/A	6-9	7.35	7.64	7.39	6.78	NA	7.31	6.47	7.10	6.95

TABLE 3-4
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS AT AOC-RR
RAILROAD BUILDING 80
HOLLOMAN AFB, NM
APRIL 1995

[m]*Basewide Background Study for Holloman AFB* (Radian, 1993).

[n]EPA Region III, Risk-Based Concentrations (R.L. Smith, November 8, 1994).

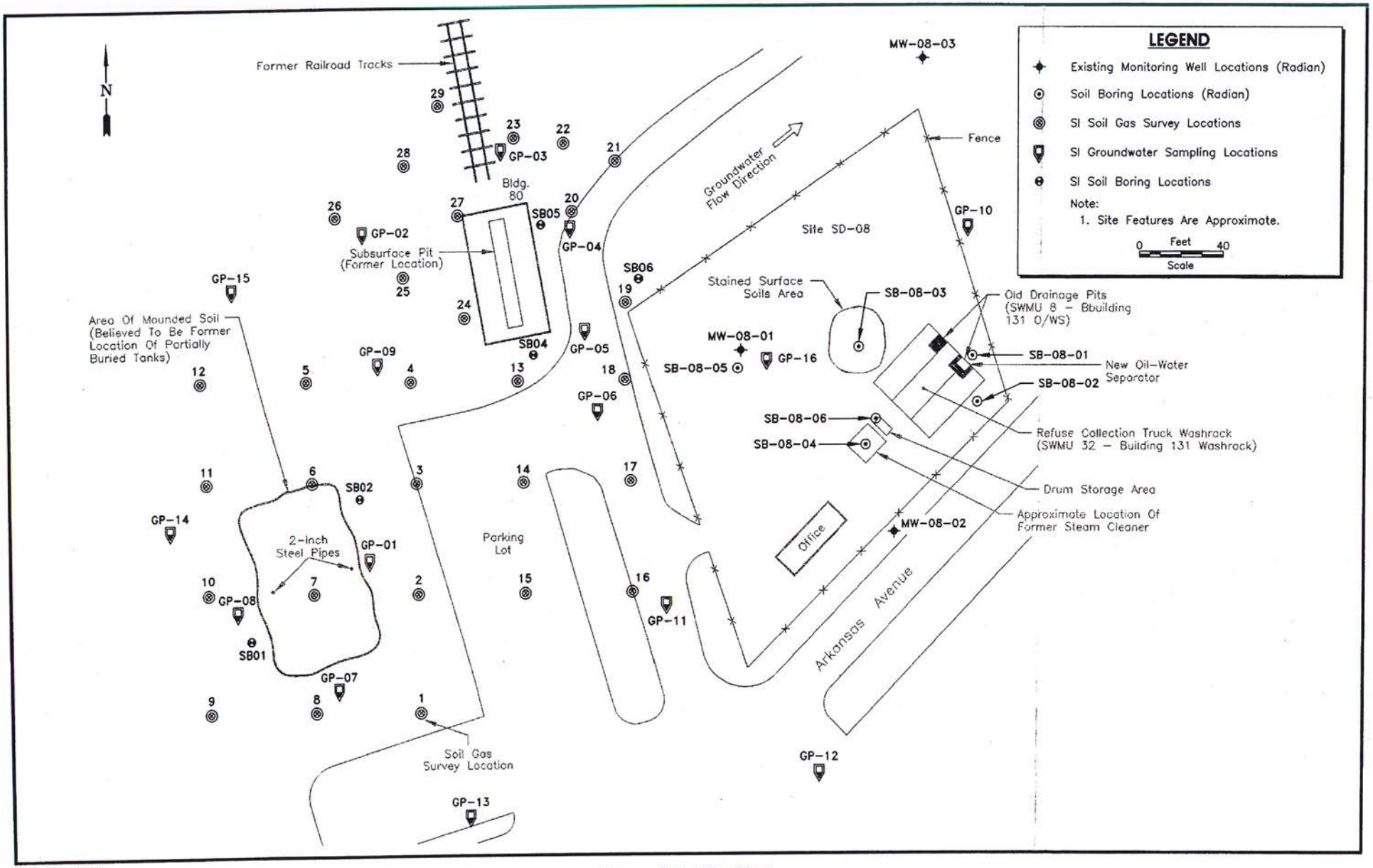
< = Indicates compound not detected at the stated reporting limit.

ug/l = Micrograms per Liter

NA = Not Analyzed

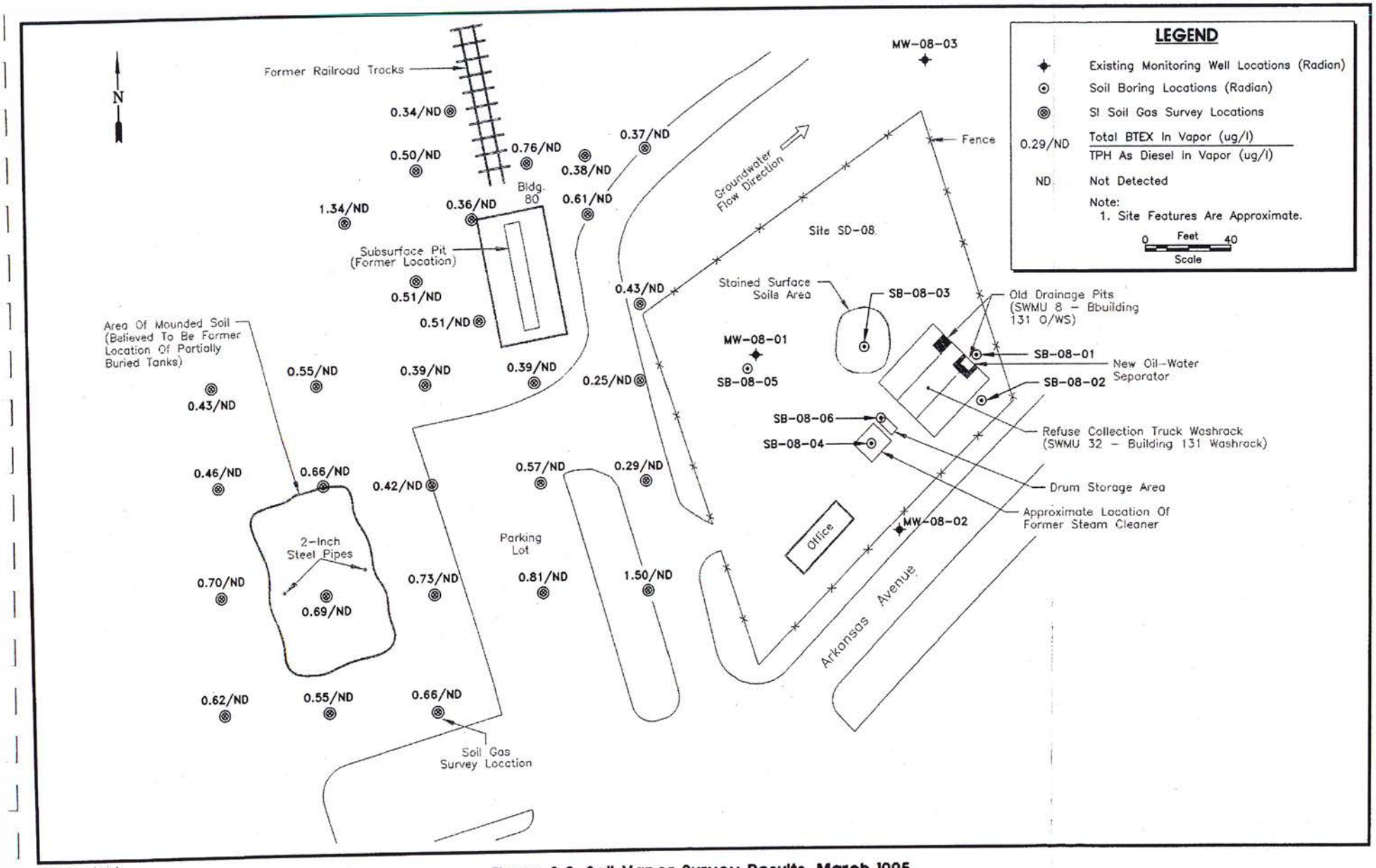
TAL = Target Analyte List

N/A = Not applicable/not established



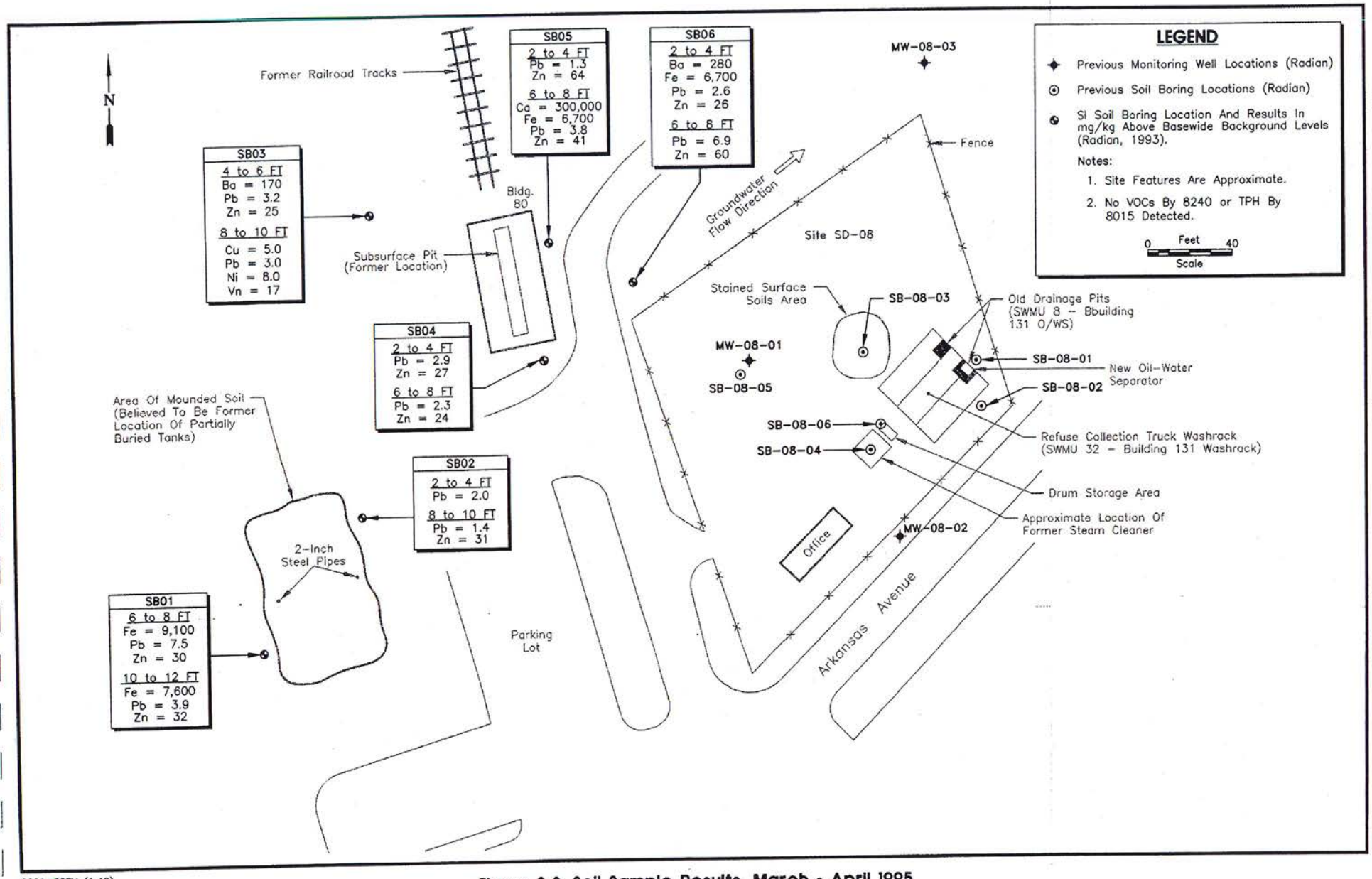
2201-ST3 (1:40)

Figure 3-1. Site Map
Site AOC-RR, Railroad Building 80



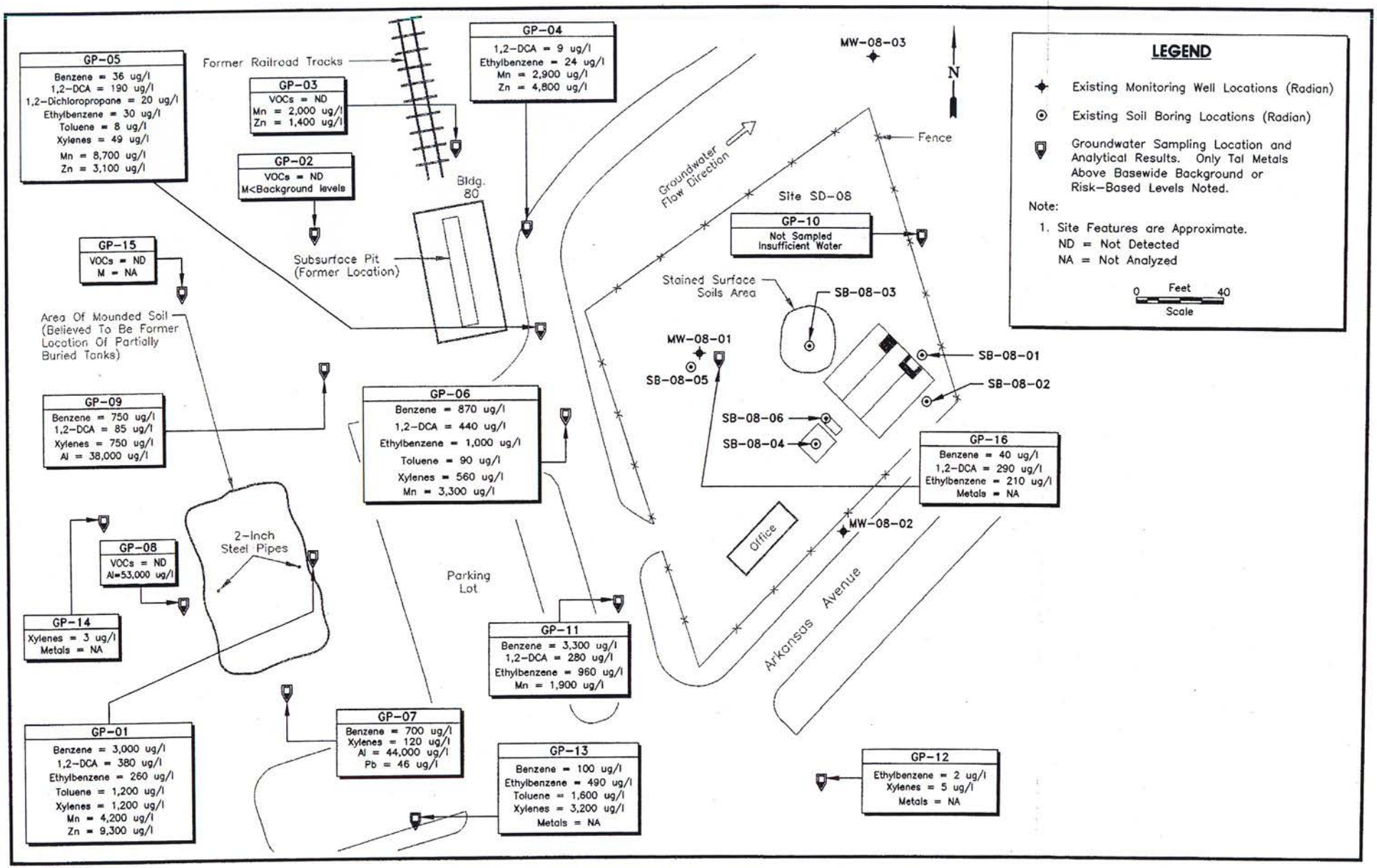
2201-SVS (1:40)

Figure 3-2. Soil Vapor Survey Results, March 1995
Site AOC-RR, Railroad Building 80



2201-SSRV (1:40)

Figure 3-3. Soil Sample Results, March - April 1995
Site AOC-RR, Railroad Building 80



2201-GA (1:40)

Figure 3-4. Groundwater Analytical Results, April 1995
Site AOC-RR Railroad, Building 80

APPENDIX B

Depth to Water Field Form

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NATIONVIEW

WATER LEVEL DATA SUMMARY

Project Name:	**SD-08 Quarterly Sampling**	**Date:**	**11/4/2013**	**Page**	**1**	**of**	**2**
Project Number:	**10-0004**	**Site Name:**		**SD-08**			
Field Personnel #1	**B. Parrish**	**Field Personnel #2**					
Survey Datum (NGVD)		**Weather (previous 24 hours):** Clear and sunny. 70-100 Deg. F					
Measuring Device	**Heron**						

Well Number	Time (hhmm)	Measuring Point		Depth to Water (ft, TOC)	Elevation of Water (ft, NGVD)
		Description	Elevation (ft, NGVD)		
MW08-01	0945			12.96	
MW08-02	1000			13.73	
MW08-03	0950			12.69	
MW-08-04	0850			10.69	
MW-08-05	0855			11.73	
MW-08-06	0840			10.25	
MW-08-07	0955			10.33	
MW-08-08	0800			9.33	
MW09-01	0930			09.26	
SD08-MW10	0940			11.16	
SD08-MW11	0935			12.74	
SD08-MW12	0830			3.18	
SD08-MW13	0820			1.66	
S10-MW01	0900			12.67	

Notes:
TOC = Top of Well Casing

NGVD = National Geodetic Vertical Datum

Comments/Observations:

Project Name:	**SD-08 Quarterly Sampling**	**Date:**	**1104013**	**Page**	**2**	**of**	**2**
Project Number:	**10-0004**	**Site Name:**	SD-08				
Field Personnel #1	**B. Parrish**	**Field Personnel #2**					
Survey Datum (NGVD)		**Weather (previous 24 hours):**					
Measuring Device	**Heron**	**Clear and sunny. 70-100 Deg. F**					

Well Number	Time (hhmm)	Measuring Point		Depth to Water (ft, TOC)	Elevation of Water (ft, NGVD)
		Description	Elevation (ft, NGVD)		
S10-MW02	0920			13.16	S10-MW02
S10-MW06	0810			10.19	
SWMU183-MW03	0910			11.15	

Notes:
TOC = Top of Well Casing

NGVD = National Geodetic Vertical Datum

Comments/Observations:

APPENDIX C

Groundwater Sampling Field Forms

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MONITORING WELL SAMPLE COLLECTION FORM

NATIONVIEW

LOCATION	Site: Holloman AFB	Location ID: SD-08	Date: 11/7/2013
		Project No./Phase:	Recorded By: B. Parrish
EQUIPMENT	Pump Type/ID#: GeoPump	Water Quality Meter/ID#: YSI 650	PID Type/ID#:
	Water Level Indicator Type/ID#: Heron	Other Equipment/ID#: LaMotte Turbidmeter	Decon Method: Liquinox / DI water rinse
	Tubing Type/Diameter (in): 1/4" Polyethylene	Other Equipment/ID#:	PPE Level: D C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC): 12.96	Casing: Type PVC Diam. (in) 2.00	Weather: Clear
	(B) Total Well Depth (ft BTOC): 19.65	(E) Casing Volume Multiplier (gal/lin ft): 0.16	Sample Depth (ft): 16.50
	(C) Water Column Thickness (ft) (B-A): 6.69	Screen Length (lin ft):	
	(D) Well Volume (gal) (C x E): 1.07 gal = 4055 mL	Screen Info: Type: PVC Size:	

CASING INFO										
Riseer/Well Casing Inner Diameter (in)	0.50	1.00	1.50	2.00	3.00	4.00	5.0	6.0	8.0	10
(E) Casing Volume Multiplier(gal/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (mLl)	Pumping Rate (mLpm)	Temp (C)	pH	Cond. (mS/cm)	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Oxidation Reduction Potential (mV)	Remarks (odor, clarity, etc.)
11/7/2013	934	13.3	4500	500	23.86	6.15	10.46	9.39	6.20	103.30	
	943	13.32	9000	500	23.94	6.16	10.65	10.05	2.50	107.60	
	952	13.33	13500	500	23.99	6.16	10.70	10.01	3.10	108.90	

Colorimeter Results					No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
Time	Analyte	Dilution	Result	Units	1	125 mL	Poly	H2SO4	N	353.2	Nitrate
					1	125 mL	Poly	None	N	353.2	Nitrite
Sample Time					1	250 mL	Poly	H2SO4	N	351.2	TKN
955										350.1	Ammonia
Sample Identification					1	500 mL	Poly	None	N	2540C	TDS
MW-08-01											
Conversions	**Stabilization Criteria**										
1 L = 0.26 gals	Temp	+/- 10%	DO	+/- 10%							
1 gal = 3.79 L	pH	+/- 0.1	Turb	+/- 5 NTU							
	Cond	+/- 10%	ORP	+/- 10							

MONITORING WELL SAMPLE COLLECTION FORM

NATIONVIEW

LOCATION	Site: Holloman AFB	Location ID: SD-08	Date: 11/6/2013
		Project No./Phase:	Recorded By: B. Parrish
EQUIPMENT	Pump Type/ID#: GeoPump	Water Quality Meter/ID#: YSI 650	PID Type/ID#:
	Water Level Indicator Type/ID#: Heron	Other Equipment/ID#: LaMotte Turbidmeter	Decon Method: Liquinox / DI water rinse
	Tubing Type/Diameter (in): 1/4" Polyethylene	Other Equipment/ID#:	PPE Level: D C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC): 13.73	Casing: Type PVC Diam. (in) 2.00	Weather: Clear
	(B) Total Well Depth (ft BTOC): 18.82	(E) Casing Volume Multiplier (gal/lin ft): 0.16	Sample Depth (ft): 16.50
	(C) Water Column Thickness (ft) (B-A): 5.09	Screen Length (lin ft):	
	(D) Well Volume (gal) (C x E): 0.81 gal = 3070 mL	Screen Info: Type: PVC Size:	

CASING INFO											
Riseer/Well Casing Inner Diameter (in)	0.50	1.00	1.50	2.00	3.00	4.00	5.0	6.0	8.0	10
(E) Casing Volume Multiplier(gal/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (mLl)	Pumping Rate (mLpm)	Temp (C)	pH	Cond. (mS/cm)	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Oxidation Reduction Potential (mV)	Remarks (odor, clarity, etc.)
11/6/2013	1417	14.04	3500	500	24.68	6.13	3.96	0.02	2.60	59.50	
	1424	14.07	7000	500	24.77	6.14	3.98	0.02	1.50	62.40	
	1431	14.08	10500	500	24.73	6.13	4.00	0.02	1.20	64.30	

Colorimeter Results					**No. Containers/Volume/Type**			**Preserv.**	**Filter (Y/N)**	**Method**	**Parameter(s)**
Time	**Analyte**	**Dilution**	**Result**	**Units**	1	125 mL	Poly	H2SO4	N	353.2	Nitrate
					1	125 mL	Poly	None	N	353.2	Nitrite
Sample Time					1	250 mL	Poly	H2SO4	N	351.2	TKN
1435										350.1	Ammonia
Sample Identification					1	500 mL	Poly	None	N	2540C	TDS
MW-08-02											
Conversions	**Stabilization Criteria**										
1 L = 0.26 gals	Temp	+/- 10%	DO	+/- 10%							
1 gal = 3.79 L	pH	+/- 0.1	Turb	+/- 5 NTU							
	Cond	+/- 10%	ORP	+/- 10							

MONITORING WELL SAMPLE COLLECTION FORM

NATIONVIEW

LOCATION	Site: Holloman AFB	Location ID: SD-08	Date: 11/7/2013
		Project No./Phase:	Recorded By: B. Parrish
EQUIPMENT	Pump Type/ID#: GeoPump	Water Quality Meter/ID#: YSI 650	PID Type/ID#:
	Water Level Indicator Type/ID#: Heron	Other Equipment/ID#: LaMotte Turbidmeter	Decon Method: Liquinox / DI water rinse
	Tubing Type/Diameter (in): 1/4" Polyethylene	Other Equipment/ID#:	PPE Level: D C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC): 12.69	Casing: Type PVC Diam. (in) 2.00	Weather: Clear
	(B) Total Well Depth (ft BTOC): 23.29	(E) Casing Volume Multiplier (gal/lin ft): 0.16	Sample Depth (ft): 18.00
	(C) Water Column Thickness (ft) (B-A): 10.60	Screen Length (lin ft):	
	(D) Well Volume (gal) (C x E): 1.70 gal = 6428 mL	Screen Info: Type: PVC Size:	

CASING INFO											
Riseer/Well Casing Inner Diameter (in)	0.50	1.00	1.50	2.00	3.00	4.00	5.0	6.0	8.0	10
(E) Casing Volume Multiplier(gal/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (mLl)	Pumping Rate (mLpm)	Temp (C)	pH	Cond. (mS/cm)	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Oxidation Reduction Potential (mV)	Remarks (odor, clarity, etc.)
11/7/2013	825	13.4	6500	500	22.41	6.63	14.10	3.57	8.90	75.40	
	838	13.46	13000	500	22.57	6.64	14.61	3.69	8.90	74.20	
	851	13.52	19500	500	22.68	6.64	14.68	3.71	5.30	70.40	

Colorimeter Results					No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
Time	Analyte	Dilution	Result	Units	1	125 mL	Poly	H2SO4	N	353.2	Nitrate
					1	125 mL	Poly	None	N	353.2	Nitrite
Sample Time					1	250 mL	Poly	H2SO4	N	351.2	TKN
855										350.1	Ammonia
Sample Identification					1	500 mL	Poly	None	N	2540C	TDS
MW-08-03											
Conversions	**Stabilization Criteria**										
1 L = 0.26 gals	Temp	+/- 10%	DO	+/- 10%							
1 gal = 3.79 L	pH	+/- 0.1	Turb	+/- 5 NTU							
	Cond	+/- 10%	ORP	+/- 10							

MONITORING WELL SAMPLE COLLECTION FORM

NATIONVIEW

LOCATION	Site: Holloman AFB	Location ID: SD-08	Date: 11/5/2013
		Project No./Phase:	Recorded By: B. Parrish
EQUIPMENT	Pump Type/ID#: GeoPump	Water Quality Meter/ID#: YSI 650	PID Type/ID#:
	Water Level Indicator Type/ID#: Heron	Other Equipment/ID#: LaMotte Turbidmeter	Decon Method: Liquinox / DI water rinse
	Tubing Type/Diameter (in): 1/4" Polyethylene	Other Equipment/ID#:	PPE Level: D C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC): 10.69	Casing: Type PVC Diam. (in) 2.00	Weather: Clear
	(B) Total Well Depth (ft BTOC): 17.92	(E) Casing Volume Multiplier (gal/lin ft): 0.16	Sample Depth (ft): 14.60
	(C) Water Column Thickness (ft) (B-A): 7.23	Screen Length (lin ft):	
	(D) Well Volume (gal) (C x E): 1.16 gal = 4396 mL	Screen Info: Type: PVC Size:	

CASING INFO											
Riseer/Well Casing Inner Diameter (in)	0.50	1.00	1.50	2.00	3.00	4.00	5.0	6.0	8.0	10
(E) Casing Volume Multiplier(gal/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (mLl)	Pumping Rate (mLpm)	Temp (C)	pH	Cond. (mS/cm)	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Oxidation Reduction Potential (mV)	Remarks (odor, clarity, etc.)
11/5/2013	928	12.29	4500	500	21.03	6.71	5.51	0.41	2.20	108.90	
	937	12.71	9000	500	21.05	6.80	5.55	0.39	1.10	106.30	
	946	12.81	13500	500	21.07	6.88	5.63	0.39	0.90	102.90	

Colorimeter Results					No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
Time	Analyte	Dilution	Result	Units	1	125 mL	Poly	H2SO4	N	353.2	Nitrate
					1	125 mL	Poly	None	N	353.2	Nitrite
Sample Time					1	250 mL	Poly	H2SO4	N	351.2	TKN
950										350.1	Ammonia
Sample Identification					1	500 mL	Poly	None	N	2540C	TDS
MW-08-04											
Conversions	**Stabilization Criteria**										
1 L = 0.26 gals	Temp	+/- 10%	DO	+/- 10%							
1 gal = 3.79 L	pH	+/- 0.1	Turb	+/- 5 NTU							
	Cond	+/- 10%	ORP	+/- 10							

MONITORING WELL SAMPLE COLLECTION FORM

NATIONVIEW

LOCATION	Site: Holloman AFB	Location ID: SD-08	Date: 11/5/2013
		Project No./Phase:	Recorded By: B. Parrish
EQUIPMENT	Pump Type/ID#: GeoPump	Water Quality Meter/ID#: YSI 650	PID Type/ID#:
	Water Level Indicator Type/ID#: Heron	Other Equipment/ID#: LaMotte Turbidmeter	Decon Method: Liquinox / DI water rinse
	Tubing Type/Diameter (in): 1/4" Polyethylene	Other Equipment/ID#:	PPE Level: D C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC): 11.53	Casing: Type PVC Diam. (in) 2.00	Weather: Clear
	(B) Total Well Depth (ft BTOC): 18.90	(E) Casing Volume Multiplier (gal/lin ft): 0.16	Sample Depth (ft): 15.00
	(C) Water Column Thickness (ft) (B-A): 7.37	Screen Length (lin ft):	
	(D) Well Volume (gal) (C x E): 1.18 gal = 4472 mL	Screen Info: Type: PVC Size:	

CASING INFO											
Riseer/Well Casing Inner Diameter (in)	0.50	1.00	1.50	2.00	3.00	4.00	5.0	6.0	8.0	10
(E) Casing Volume Multiplier(gal/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (mLl)	Pumping Rate (mLpm)	Temp (C)	pH	Cond. (mS/cm)	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Oxidation Reduction Potential (mV)	Remarks (odor, clarity, etc.)
11/5/2013	1026	11.76	4500	500	21.92	6.41	2.65	0.02	5.30	136.30	Roots in casing. Odor of decaying
	1035	11.78	9000	500	21.96	6.42	2.65	0.02	3.10	138.10	vegitation.
	1044	11.81	13500	500	22.00	6.42	2.64	0.01	1.80	139.20	

Colorimeter Results					No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
Time	Analyte	Dilution	Result	Units	1	125 mL	Poly	H2SO4	N	353.2	Nitrate
					1	125 mL	Poly	None	N	353.2	Nitrite
Sample Time					1	250 mL	Poly	H2SO4	N	351.2	TKN
1050										350.1	Ammonia
Sample Identification					1	500 mL	Poly	None	N	2540C	TDS
MW-08-05											
Conversions	**Stabilization Criteria**										
1 L = 0.26 gals	Temp	+/- 10%	DO	+/- 10%							
1 gal = 3.79 L	pH	+/- 0.1	Turb	+/- 5 NTU							
	Cond	+/- 10%	ORP	+/- 10							

MONITORING WELL SAMPLE COLLECTION FORM

NATIONVIEW

LOCATION	Site: Holloman AFB	Location ID: SD-08	Date: 11/5/2013
		Project No./Phase:	Recorded By: B. Parrish
EQUIPMENT	Pump Type/ID#: GeoPump	Water Quality Meter/ID#: YSI 650	PID Type/ID#:
	Water Level Indicator Type/ID#: Heron	Other Equipment/ID#: LaMotte Turbidmeter	Decon Method: Liquinox / DI water rinse
	Tubing Type/Diameter (in): 1/4" Polyethylene	Other Equipment/ID#:	PPE Level: D C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC): 10.25	Casing: Type PVC Diam. (in) 2.00	Weather: Clear
	(B) Total Well Depth (ft BTOC): 14.65	(E) Casing Volume Multiplier (gal/lin ft): 0.16	Sample Depth (ft): 12.6
	(C) Water Column Thickness (ft) (B-A): 4.40	Screen Length (lin ft):	
	(D) Well Volume (gal) (C x E): 0.70 gal = 2653 mL	Screen Info: Type: PVC Size:	

CASING INFO											
Riseer/Well Casing Inner Diameter (in)	0.50	1.00	1.50	2.00	3.00	4.00	5.0	6.0	8.0	10
(E) Casing Volume Multiplier(gal/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (mLl)	Pumping Rate (mLpm)	Temp (C)	pH	Cond. (mS/cm)	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Oxidation Reduction Potential (mV)	Remarks (odor, clarity, etc.)
11/5/2013	741	10.53	3000	500	20.84	6.93	22.01	0.26	4.70	146.60	
	747	10.56	6000	500	20.83	6.92	22.64	0.25	2.60	142.00	
	753	10.59	9000	500	20.85	6.91	22.89	0.25	2.40	138.30	

Colorimeter Results					**No. Containers/Volume/Type**			**Preserv.**	**Filter (Y/N)**	**Method**	**Parameter(s)**
Time	**Analyte**	**Dilution**	**Result**	**Units**	1	125 mL	Poly	H2SO4	N	353.2	Nitrate
					1	125 mL	Poly	None	N	353.2	Nitrite
Sample Time					1	250 mL	Poly	H2SO4	N	351.2	TKN
800										350.1	Ammonia
Sample Identification					1	500 mL	Poly	None	N	2540C	TDS
MW-08-06											
Conversions	**Stabilization Criteria**										
1 L = 0.26 gals	Temp	+/- 10%	DO	+/- 10%							
1 gal = 3.79 L	pH	+/- 0.1	Turb	+/- 5 NTU							
	Cond	+/- 10%	ORP	+/- 10							

MONITORING WELL SAMPLE COLLECTION FORM

NATIONVIEW

LOCATION	Site: Holloman AFB	Location ID: SD-08	Date: 11/6/2013
		Project No./Phase:	Recorded By: B. Parrish
EQUIPMENT	Pump Type/ID#: GeoPump	Water Quality Meter/ID#: YSI 650	PID Type/ID#:
	Water Level Indicator Type/ID#: Heron	Other Equipment/ID#: LaMotte Turbidmeter	Decon Method: Liquinox / DI water rinse
	Tubing Type/Diameter (in): 1/4" Polyethylene	Other Equipment/ID#:	PPE Level: D C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC): 10.33	Casing: Type PVC Diam. (in) 2.00	Weather: Clear
	(B) Total Well Depth (ft BTOC): 16.39	(E) Casing Volume Multiplier (gal/lin ft): 0.16	Sample Depth (ft): 14.00
	(C) Water Column Thickness (ft) (B-A): 6.06	Screen Length (lin ft):	
	(D) Well Volume (gal) (C x E): 0.97 gal = 3676 mL	Screen Info: Type: PVC Size:	

CASING INFO											
Riseer/Well Casing Inner Diameter (in)	0.50	1.00	1.50	2.00	3.00	4.00	5.0	6.0	8.0	10
(E) Casing Volume Multiplier(gal/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (mLl)	Pumping Rate (mLpm)	Temp (C)	pH	Cond. (mS/cm)	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Oxidation Reduction Potential (mV)	Remarks (odor, clarity, etc.)
11/6/2013	1313	10.41	4000	500	24.70	6.08	6.02	0.02	6.50	98.00	
	1321	10.42	8000	500	24.78	6.08	5.65	0.02	2.40	93.70	
	1329	10.42	12000	500	24.79	6.08	5.59	0.02	1.90	91.50	

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time
1335

Sample Identification
MW-08-07

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
1	125 mL	Poly	H2SO4	N	353.2	Nitrate
1	125 mL	Poly	None	N	353.2	Nitrite
1	250 mL	Poly	H2SO4	N	351.2	TKN
					350.1	Ammonia
1	500 mL	Poly	None	N	2540C	TDS

Conversions	Stabilization Criteria			
1 L = 0.26 gals	Temp	+/- 10%	DO	+/- 10%
1 gal = 3.79 L	pH	+/- 0.1	Turb	+/- 5 NTU
	Cond	+/- 10%	ORP	+/- 10

MONITORING WELL SAMPLE COLLECTION FORM

NATIONVIEW

LOCATION	Site: Holloman AFB	Location ID: SD-08	Date: 11/6/2013
		Project No./Phase:	Recorded By: B. Parrish
EQUIPMENT	Pump Type/ID#: GeoPump	Water Quality Meter/ID#: YSI 650	PID Type/ID#:
	Water Level Indicator Type/ID#: Heron	Other Equipment/ID#: LaMotte Turbidmeter	Decon Method: Liquinox / DI water rinse
	Tubing Type/Diameter (in): 1/4" Polyethylene	Other Equipment/ID#:	PPE Level: D C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC): 9.33	Casing: Type PVC Diam. (in) 2.00	Weather: Clear
	(B) Total Well Depth (ft BTOC): 16.00	(E) Casing Volume Multiplier (gal/lin ft): 0.16	Sample Depth (ft): 13.00
	(C) Water Column Thickness (ft) (B-A): 6.67	Screen Length (lin ft):	
	(D) Well Volume (gal) (C x E): 1.07 gal =4055 mL	Screen Info: Type: PVC Size:	

CASING INFO											
Riseer/Well Casing Inner Diameter (in)	0.50	1.00	1.50	2.00	3.00	4.00	5.0	6.0	8.0	10
(E) Casing Volume Multiplier(gal/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (mLl)	Pumping Rate (mLpm)	Temp (C)	pH	Cond. (mS/cm)	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Oxidation Reduction Potential (mV)	Remarks (odor, clarity, etc.)
11/6/2013	1126	10.23	4500	500	22.13	6.21	29.49	0.02	3.60	177.90	
	1135	10.58	9000	500	22.04	6.23	30.44	0.02	3.20	178.20	
	1144	10.76	13500	500	22.05	6.24	31.27	0.01	2.90	179.30	

Colorimeter Results					**No. Containers/Volume/Type**			**Preserv.**	**Filter (Y/N)**	**Method**	**Parameter(s)**
Time	**Analyte**	**Dilution**	**Result**	**Units**	1	125 mL	Poly	H2SO4	N	353.2	Nitrate
					1	125 mL	Poly	None	N	353.2	Nitrite
Sample Time					1	250 mL	Poly	H2SO4	N	351.2	TKN
1150										350.1	Ammonia
Sample Identification					1	500 mL	Poly	None	N	2540C	TDS
MW-08-08											
Conversions	**Stabilization Criteria**										
1 L = 0.26 gals	Temp	+/- 10%	DO	+/- 10%							
1 gal = 3.79 L	pH	+/- 0.1	Turb	+/- 5 NTU							
	Cond	+/- 10%	ORP	+/- 10							

MONITORING WELL SAMPLE COLLECTION FORM

NATIONVIEW

LOCATION	Site: Holloman AFB	Location ID: SD-08	Date: 11/6/2013
		Project No./Phase:	Recorded By: B. Parrish
EQUIPMENT	Pump Type/ID#: GeoPump	Water Quality Meter/ID#: YSI 650	PID Type/ID#:
	Water Level Indicator Type/ID#: Heron	Other Equipment/ID#: LaMotte Turbidmeter	Decon Method: Liquinox / DI water rinse
	Tubing Type/Diameter (in): 1/4" Polyethylene	Other Equipment/ID#:	PPE Level: D C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC): 11.16	Casing: Type PVC Diam. (in) 2.00	Weather: Clear
	(B) Total Well Depth (ft BTOC): 19.88	(E) Casing Volume Multiplier (gal/lin ft): 0.16	Sample Depth (ft): 16.00
	(C) Water Column Thickness (ft) (B-A): 8.72	Screen Length (lin ft):	
	(D) Well Volume (gal) (C x E): 1.40 gal = 5306 mL	Screen Info: Type: PVC Size:	

CASING INFO											
Riseer/Well Casing Inner Diameter (in)	0.50	1.00	1.50	2.00	3.00	4.00	5.0	6.0	8.0	10
(E) Casing Volume Multiplier(gal/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (mLl)	Pumping Rate (mLpm)	Temp (C)	pH	Cond. (mS/cm)	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Oxidation Reduction Potential (mV)	Remarks (odor, clarity, etc.)
11/6/2013	1023	12.05	5500	500	22.92	6.11	4.62	0.02	6.50	135.00	
	1034	12.44	11000	500	22.89	6.12	4.58	0.02	3.00	134.40	
	1045	12.65	16500	500	22.82	6.12	4.57	0.03	1.90	131.00	

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time
1050

Sample Identification
SD08-MW10

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
1	125 mL	Poly	H2SO4	N	353.2	Nitrate
1	125 mL	Poly	None	N	353.2	Nitrite
1	250 mL	Poly	H2SO4	N	351.2	TKN
					350.1	Ammonia
1	500 mL	Poly	None	N	2540C	TDS

Conversions	Stabilization Criteria			
1 L = 0.26 gals	Temp	+/- 10%	DO	+/- 10%
1 gal = 3.79 L	pH	+/- 0.1	Turb	+/- 5 NTU
	Cond	+/- 10%	ORP	+/- 10

MONITORING WELL SAMPLE COLLECTION FORM

NATIONVIEW

LOCATION	Site: Holloman AFB	Location ID: SD-08	Date: 11/6/2013
		Project No./Phase:	Recorded By: B. Parrish
EQUIPMENT	Pump Type/ID#: GeoPump	Water Quality Meter/ID#: YSI 650	PID Type/ID#:
	Water Level Indicator Type/ID#: Heron	Other Equipment/ID#: LaMotte Turbidmeter	Decon Method: Liquinox / DI water rinse
	Tubing Type/Diameter (in): 1/4" Polyethylene	Other Equipment/ID#:	PPE Level: D C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC): 12.74	Casing: Type PVC Diam. (in) 2.00	Weather: Clear
	(B) Total Well Depth (ft BTOC): 20.51	(E) Casing Volume Multiplier (gal/lin ft): 0.16	Sample Depth (ft): 17.00
	(C) Water Column Thickness (ft) (B-A): 7.77	Screen Length (lin ft):	
	(D) Well Volume (gal) (C x E): 1.24 gal = 4718 mL	Screen Info: Type: PVC Size:	

CASING INFO										
Riseer/Well Casing Inner Diameter (in)	0.50	1.00	1.50	2.00	3.00	4.00	5.0	6.0	8.0	10
(E) Casing Volume Multiplier(gal/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (mLl)	Pumping Rate (mLpm)	Temp (C)	pH	Cond. (mS/cm)	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Oxidation Reduction Potential (mV)	Remarks (odor, clarity, etc.)
11/6/2013	920	13.71	5000	500	21.18	6.42	21.63	0.01	1.80	38.00	
	930	14.44	10000	500	21.37	6.43	21.59	0.01	1.70	36.90	
	940	15.1	15000	500	21.38	6.42	21.14	0.01	1.20	36.10	

Colorimeter Results					No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
Time	Analyte	Dilution	Result	Units	1	125 mL	Poly	H2SO4	N	353.2	Nitrate
					1	125 mL	Poly	None	N	353.2	Nitrite
Sample Time					1	250 mL	Poly	H2SO4	N	351.2	TKN
945										350.1	Ammonia
Sample Identification					1	500 mL	Poly	None	N	2540C	TDS
SD08-MW11											
Conversions	**Stabilization Criteria**										
1 L = 0.26 gals	Temp	+/- 10%	DO	+/- 10%							
1 gal = 3.79 L	pH	+/- 0.1	Turb	+/- 5 NTU							
	Cond	+/- 10%	ORP	+/- 10							

MONITORING WELL SAMPLE COLLECTION FORM

NATIONVIEW

LOCATION	Site: Holloman AFB	Location ID: SD-08	Date: 11/4/2013
		Project No./Phase:	Recorded By: B. Parrish
EQUIPMENT	Pump Type/ID#: GeoPump	Water Quality Meter/ID#: YSI 650	PID Type/ID#:
	Water Level Indicator Type/ID#: Heron	Other Equipment/ID#: LaMotte Turbidmeter	Decon Method: Liquinox / DI water rinse
	Tubing Type/Diameter (in): 1/4" Polyethylene	Other Equipment/ID#:	PPE Level: D C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC): 3.18	Casing: Type PVC Diam. (in) 2.00	Weather: Clear
	(B) Total Well Depth (ft BTOC): 15.50	(E) Casing Volume Multiplier (gal/lin ft): 0.16	Sample Depth (ft): 10
	(C) Water Column Thickness (ft) (B-A): 12.32	Screen Length (lin ft):	
	(D) Well Volume (gal) (C x E): 1.97 gal = 7466 mL	Screen Info: Type: PVC Size:	

CASING INFO										
Riseer/Well Casing Inner Diameter (in)	0.50	1.00	1.50	2.00	3.00	4.00	5.0	6.0	8.0	10
(E) Casing Volume Multiplier(gal/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (mLl)	Pumping Rate (mLpm)	Temp (C)	pH	Cond. (mS/cm)	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Oxidation Reduction Potential (mV)	Remarks (odor, clarity, etc.)
11/4/2013	1430	3.58	7500	500	21.52	6.31	46.13	0.09	4.00	116.70	
	1445	3.59	15000	500	21.47	6.31	48.81	0.08	2.10	114.50	
	1500	3.6	22500	500	21.49	6.31	48.89	0.08	1.80	112.90	

Colorimeter Results					No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
Time	Analyte	Dilution	Result	Units	1	125 mL	Poly	H2SO4	N	353.2	Nitrate
					1	125 mL	Poly	None	N	353.2	Nitrite
Sample Time					1	250 mL	Poly	H2SO4	N	351.2	TKN
1505										350.1	Ammonia
Sample Identification					1	500 mL	Poly	None	N	2540C	TDS
SD08-MW12											
Conversions	**Stabilization Criteria**										
1 L = 0.26 gals	Temp	+/- 10%	DO	+/- 10%							
1 gal = 3.79 L	pH	+/- 0.1	Turb	+/- 5 NTU							
	Cond	+/- 10%	ORP	+/- 10							

MONITORING WELL SAMPLE COLLECTION FORM

NATIONVIEW

LOCATION	Site: Holloman AFB	Location ID: SD-08	Date: 11/4/2013
		Project No./Phase:	Recorded By: B. Parrish
EQUIPMENT	Pump Type/ID#: GeoPump	Water Quality Meter/ID#: YSI 650	PID Type/ID#:
	Water Level Indicator Type/ID#: Heron	Other Equipment/ID#: LaMotte Turbidmeter	Decon Method: Liquinox / DI water rinse
	Tubing Type/Diameter (in): 1/4" Polyethylene	Other Equipment/ID#:	PPE Level: D C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC): 1.66	Casing: Type PVC Diam. (in) 2.00	Weather: Clear
	(B) Total Well Depth (ft BTOC): 15.48	(E) Casing Volume Multiplier (gal/lin ft): 0.16	Sample Depth (ft): 9
	(C) Water Column Thickness (ft) (B-A): 13.82	Screen Length (lin ft):	
	(D) Well Volume (gal) (C x E): 2.21 gal = 8376 mL	Screen Info: Type: PVC Size:	

CASING INFO										
Riseer/Well Casing Inner Diameter (in)	0.50	1.00	1.50	2.00	3.00	4.00	5.0	6.0	8.0	10
(E) Casing Volume Multiplier(gal/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (mLl)	Pumping Rate (mLpm)	Temp (C)	pH	Cond. (mS/cm)	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Oxidation Reduction Potential (mV)	Remarks (odor, clarity, etc.)
11/4/2013	1310	3.49	8500	500	20.64	6.29	47.45	0.02	4.30	130.00	
	1327	3.57	17000	500	20.60	6.29	49.48	0.02	2.50	126.80	
	1344	3.73	25500	500	20.57	6.29	50.18	0.03	2.40	124.30	

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time
1350
Sample Identification
SD08-MW13

Conversions	Stabilization Criteria			
1 L = 0.26 gals	Temp	+/- 10%	DO	+/- 10%
1 gal = 3.79 L	pH	+/- 0.1	Turb	+/- 5 NTU
	Cond	+/- 10%	ORP	+/_ 10

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
1	125 mL	Poly	H2SO4	N	353.2	Nitrate
1	125 mL	Poly	None	N	353.2	Nitrite
1	250 mL	Poly	H2SO4	N	351.2	TKN
					350.1	Ammonia
1	500 mL	Poly	None	N	2540C	TDS

MONITORING WELL SAMPLE COLLECTION FORM

NATIONVIEW

LOCATION	Site: Holloman AFB	Location ID: SD-08	Date: 11/5/2013
		Project No./Phase:	Recorded By: B. Parrish
EQUIPMENT	Pump Type/ID#: GeoPump	Water Quality Meter/ID#: YSI 650	PID Type/ID#:
	Water Level Indicator Type/ID#: Heron	Other Equipment/ID#: LaMotte Turbidmeter	Decon Method: Liquinox / DI water rinse
	Tubing Type/Diameter (in): 1/4" Polyethylene	Other Equipment/ID#:	PPE Level: D C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC): 12.67	Casing: Type PVC Diam. (in) 2.00	Weather: Clear
	(B) Total Well Depth (ft BTOC): 21.66	(E) Casing Volume Multiplier (gal/lin ft): 0.16	Sample Depth (ft): 17.00
	(C) Water Column Thickness (ft) (B-A): 8.99	Screen Length (lin ft):	
	(D) Well Volume (gal) (C x E): 1.44 gal = 5458 mL	Screen Info: Type: PVC Size:	

CASING INFO											
Riseer/Well Casing Inner Diameter (in)	0.50	1.00	1.50	2.00	3.00	4.00	5.0	6.0	8.0	10
(E) Casing Volume Multiplier(gal/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (mLl)	Pumping Rate (mLpm)	Temp (C)	pH	Cond. (mS/cm)	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Oxidation Reduction Potential (mV)	Remarks (odor, clarity, etc.)
11/5/2013	1128	12.94	5500	500	20.90	6.49	20.15	0.03	4.00	112.00	
	1139	12.95	11000	500	20.89	6.40	20.01	0.02	2.10	110.70	
	1150	12.96	16500	500	21.01	6.41	19.91	0.02	1.40	109.10	

Colorimeter Results					No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
Time	Analyte	Dilution	Result	Units	1	125 mL	Poly	H2SO4	N	353.2	Nitrate
					1	125 mL	Poly	None	N	353.2	Nitrite
Sample Time					1	250 mL	Poly	H2SO4	N	351.2	TKN
1155										350.1	Ammonia
Sample Identification					1	500 mL	Poly	None	N	2540C	TDS
S10-MW01											
Conversions	**Stabilization Criteria**										
1 L = 0.26 gals	Temp	+/- 10%	DO	+/- 10%							
1 gal = 3.79 L	pH	+/- 0.1	Turb	+/- 5 NTU							
	Cond	+/- 10%	ORP	+/- 10							

MONITORING WELL SAMPLE COLLECTION FORM

NATIONVIEW

LOCATION	Site: Holloman AFB	Location ID: SD-08	Date: 11/6/2013
		Project No./Phase:	Recorded By: B. Parrish
EQUIPMENT	Pump Type/ID#: GeoPump	Water Quality Meter/ID#: YSI 650	PID Type/ID#:
	Water Level Indicator Type/ID#: Heron	Other Equipment/ID#: LaMotte Turbidmeter	Decon Method: Liquinox / DI water rinse
	Tubing Type/Diameter (in): 1/4" Polyethylene	Other Equipment/ID#:	PPE Level: D C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC): 13.16	Casing: Type PVC Diam. (in) 2.00	Weather: Clear
	(B) Total Well Depth (ft BTOC): 16.84	(E) Casing Volume Multiplier (gal/lin ft): 0.16	Sample Depth (ft): 15.00
	(C) Water Column Thickness (ft) (B-A): 3.68	Screen Length (lin ft):	
	(D) Well Volume (gal) (C x E): 0.59 gal = 2236 mL	Screen Info: Type: PVC Size:	

CASING INFO											
Riseer/Well Casing Inner Diameter (in)	0.50	1.00	1.50	2.00	3.00	4.00	5.0	6.0	8.0	10
(E) Casing Volume Multiplier(gal/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (mLl)	Pumping Rate (mLpm)	Temp (C)	pH	Cond. (mS/cm)	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Oxidation Reduction Potential (mV)	Remarks (odor, clarity, etc.)
11/6/2013	810	13.72	2500	250	21.37	6.83	3.28	0.58	1.70	81.70	
	820	13.90	5000	250	21.55	6.83	3.31	0.55	1.00	87.00	
	830	14.01	7500	250	21.58	6.82	3.34	0.53	0.80	89.10	

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Sample Time
835
Sample Identification
S10-MW02

Conversions	Stabilization Criteria			
1 L = 0.26 gals	Temp	+/- 10%	DO	+/- 10%
1 gal = 3.79 L	pH	+/- 0.1	Turb	+/- 5 NTU
	Cond	+/- 10%	ORP	+/- 10

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
1	125 mL	Poly	H2SO4	N	353.2	Nitrate
1	125 mL	Poly	None	N	353.2	Nitrite
1	250 mL	Poly	H2SO4	N	351.2	TKN
					350.1	Ammonia
1	500 mL	Poly	None	N	2540C	TDS

MONITORING WELL SAMPLE COLLECTION FORM

NATIONVIEW

LOCATION	Site: Holloman AFB	Location ID: SD-08	Date: 11/4/2013
		Project No./Phase:	Recorded By: B. Parrish
EQUIPMENT	Pump Type/ID#: GeoPump	Water Quality Meter/ID#: YSI 650	PID Type/ID#:
	Water Level Indicator Type/ID#: Heron	Other Equipment/ID#: LaMotte Turbidmeter	Decon Method: Liquinox / DI water rinse
	Tubing Type/Diameter (in): 1/4" Polyethylene	Other Equipment/ID#:	PPE Level: D C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC): 10.19	Casing: Type PVC Diam. (in) 2.00	Weather: Clear
	(B) Total Well Depth (ft BTOC): 21.15	(E) Casing Volume Multiplier (gal/lin ft): 0.16	Sample Depth (ft): 16
	(C) Water Column Thickness (ft) (B-A): 1.10	Screen Length (lin ft):	
	(D) Well Volume (gal) (C x E): 1.75 gal = 6632 mL	Screen Info: Type: PVC Size:	

CASING INFO										
Riseer/Well Casing Inner Diameter (in)	0.50	1.00	1.50	2.00	3.00	4.00	5.0	6.0	8.0	10
(E) Casing Volume Multiplier(gal/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (mLl)	Pumping Rate (mLpm)	Temp (C)	pH	Cond. (mS/cm)	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Oxidation Reduction Potential (mV)	Remarks (odor, clarity, etc.)
11/4/2013	1151	10.58	6500	500	21.67	6.59	15.90	1.20	9.00	182.50	
	1204	10.60	13000	500	21.71	6.60	15.97	1.19	11.00	180.70	
	1217	10.61	19500	500	21.72	6.60	16.05	1.15	6.50	178.20	

Colorimeter Results					**No. Containers/Volume/Type**			**Preserv.**	**Filter (Y/N)**	**Method**	**Parameter(s)**
Time	**Analyte**	**Dilution**	**Result**	**Units**	1	125 mL	Poly	H2SO4	N	353.2	Nitrate
					1	125 mL	Poly	None	N	353.2	Nitrite
Sample Time					1	250 mL	Poly	H2SO4	N	351.2	TKN
1230										350.1	Ammonia
Sample Identification					1	500 mL	Poly	None	N	2540C	TDS
S10-MW06											
Conversions	**Stabilization Criteria**										
1 L = 0.26 gals	Temp	+/- 10%	DO	+/- 10%							
1 gal = 3.79 L	pH	+/- 0.1	Turb	+/- 5 NTU							
	Cond	+/- 10%	ORP	+/- 10							

MONITORING WELL SAMPLE COLLECTION FORM

NATIONVIEW

LOCATION	Site: Holloman AFB	Location ID: SD-08	Date: 11/5/2013
		Project No./Phase:	Recorded By: B. Parrish
EQUIPMENT	Pump Type/ID#: GeoPump	Water Quality Meter/ID#: YSI 650	PID Type/ID#:
	Water Level Indicator Type/ID#: Heron	Other Equipment/ID#: LaMotte Turbidmeter	Decon Method: Liquinox / DI water rinse
	Tubing Type/Diameter (in): 1/4" Polyethylene	Other Equipment/ID#:	PPE Level: D C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC): 11.15	Casing: Type PVC Diam. (in) 2.00	Weather: Clear
	(B) Total Well Depth (ft BTOC): 15.95	(E) Casing Volume Multiplier (gal/lin ft): 0.16	Sample Depth (ft): 14.00
	(C) Water Column Thickness (ft) (B-A): 4.80	Screen Length (lin ft):	
	(D) Well Volume (gal) (C x E): 0.77 gal = 2918 mL	Screen Info: Type: PVC Size:	

CASING INFO										
Riseer/Well Casing Inner Diameter (in)	0.50	1.00	1.50	2.00	3.00	4.00	5.0	6.0	8.0	10
(E) Casing Volume Multiplier(gal/lin ft)	0.02	0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (mLl)	Pumping Rate (mLpm)	Temp (C)	pH	Cond. (mS/cm)	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Oxidation Reduction Potential (mV)	Remarks (odor, clarity, etc.)
11/5/2013	1401	13.97	3000	250	23.44	6.89	7.88	0.02	2.30	191.90	Low Recharge. Very strong sewage
	1413	14.26	6000	250	23.31	6.90	7.81	0.02	1.30	189.20	odor.
	1425	14.42	9000	250	23.36	6.89	7.79	0.02	1.10	189.90	

Colorimeter Results					No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
Time	Analyte	Dilution	Result	Units	1	125 mL	Poly	H2SO4	N	353.2	Nitrate
					1	125 mL	Poly	None	N	353.2	Nitrite
Sample Time					1	250 mL	Poly	H2SO4	N	351.2	TKN
1430										350.1	Ammonia
Sample Identification					1	500 mL	Poly	None	N	2540C	TDS
SWMU183-MW03											
Conversions	**Stabilization Criteria**										
1 L = 0.26 gals	Temp	+/- 10%	DO	+/- 10%							
1 gal = 3.79 L	pH	+/- 0.1	Turb	+/- 5 NTU							
	Cond	+/- 10%	ORP	+/- 10							

APPENDIX D

Laboratory Analytical Results
(Provided on Enclosed CD)

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NELAP CERTIFICATE NUMBER 01955
DOD ELAP CERTIFICATE NUMBER L13-190

ANALYTICAL RESULTS

PERFORMED BY

GULF COAST ANALYTICAL LABORATORIES, INC.

7979 GSRI Avenue

Baton Rouge, LA 70820

Report Date 11/20/2013

GCAL Report 213110611

Deliver To	NationView, LLC 445 Union Blvd. Suite 129 Denver, CO 80228 303-597-2450 Ext. 104
Attn	Jim Moore

Project Holloman AFB SD-08

CASE NARRATIVE

Client: NationView LLC **Report:** 213110611

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.

VOLATILES MASS SPECTROMETRY

In the EPA 8260B analysis for analytical batch 519587, the %D/%Drift is outside ± 30% for Trichlorofluoromethane in the CCV. The response is high and this analyte was not detected in the associated samples.

In the EPA 8260B analysis for analytical batch 519587, the MS/MSD exhibited spike recovery and RPD failures. The LCS and/or LCSD recoveries are above the upper control limit for Bromochloromethane and tert-Butyl methyl ether (MTBE). These compounds were not detected in the associated samples.

METALS

In the SW-846 6010C Dissolved analysis for prep batch 519409, the MS/MSD recoveries are not applicable because the spike was diluted out of the samples. All LCS recoveries are acceptable. Sodium was detected in the method blank. The concentration was insignificant as compared to the concentration detected in the associated samples.

In the EPA 6010C Dissolved analysis, samples 21311061101 (S10-MW6), 21311061102 (SD08-MW13), 21311061103 (SD08-MW13A), 21311061104 (SD08-MW12), 21311061105 (MW-08-06), 21311061106 (MW-08-06-MS), 21311061107 (MW-08-06-MSD), and 21311061110 (S10-MW01) had to be diluted in order to eliminate a chemical or physical interference and/or to bracket the concentration of a target analyte within the linear dynamic range of the instrument. This is reflected in the elevated reporting limits.

In the EPA 7470A analysis for prep batch 519414, 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 7470A Dissolved analysis for prep batch 519415, 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.

CONVENTIONALS

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 or to eliminate a chemical or physical interference. This is reflected in the elevated reporting limit.

There was insufficient time to process the samples at receiving and to perform the Nitrate analysis for samples 21311061101 (S10-MW6), 21311061102 (SD08-MW13), 21311061103 (SD08-MW13A), and 21311061104 (SD08-MW12) within the 48-hour holding time. The client was notified.

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 213110611

THIS REPORT CONTAINS _____ PAGES.

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061101	S10-MW6	Water	11/04/2013 12:30	11/06/2013 10:30
21311061102	SD08-MW13	Water	11/04/2013 13:50	11/06/2013 10:30
21311061103	SD08-MW13A	Water	11/04/2013 13:50	11/06/2013 10:30
21311061104	SD08-MW12	Water	11/04/2013 15:05	11/06/2013 10:30
21311061105	MW-08-06	Water	11/05/2013 08:00	11/06/2013 10:30
21311061106	MW-08-06-MS	Water	11/05/2013 08:00	11/06/2013 10:30
21311061107	MW-08-06-MSD	Water	11/05/2013 08:00	11/06/2013 10:30
21311061108	MW-08-04	Water	11/05/2013 09:50	11/06/2013 10:30
21311061109	MW-08-05	Water	11/05/2013 10:50	11/06/2013 10:30
21311061110	S10-MW01	Water	11/05/2013 11:55	11/06/2013 10:30
21311061111	TRIP BLANK	Water	11/04/2013 00:00	11/06/2013 10:30

Summary of Compounds Detected

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061101	**S10-MW6**	Water	11/04/2013 12:30	11/06/2013 10:30

EPA 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-70-2	Calcium	435	8.00	2.00	mg/L
7440-50-8	Copper	0.18J	0.20	0.050	mg/L
7439-95-4	Magnesium	598	2.00	0.50	mg/L
7439-96-5	Manganese	0.15	0.15	0.038	mg/L
7440-09-7	Potassium	32.5	5.00	1.25	mg/L
7440-23-5	Sodium	3320	10.0	2.50	mg/L
7440-62-2	Vanadium	0.49	0.20	0.050	mg/L

SM 2540 C-2011

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	15400	10.0	4.39	mg/L

EPA 300.0

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	43.2	4.00	1.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061102	**SD08-MW13**	Water	11/04/2013 13:50	11/06/2013 10:30

EPA 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-70-2	Calcium	655	8.00	2.00	mg/L
7440-50-8	Copper	0.35	0.20	0.050	mg/L
7439-95-4	Magnesium	2200	2.00	0.50	mg/L
7440-09-7	Potassium	67.0	5.00	1.25	mg/L
7440-62-2	Vanadium	0.63	0.20	0.050	mg/L

EPA 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	Sodium	10600	100	25.0	mg/L

EPA 300.0

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	12.9	10.0	2.50	mg/L

SM 2540 C-2011

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	33500	100	43.9	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061103	**SD08-MW13A**	Water	11/04/2013 13:50	11/06/2013 10:30

EPA 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-70-2	Calcium	674	8.00	2.00	mg/L
7440-50-8	Copper	0.32	0.20	0.050	mg/L
7439-95-4	Magnesium	2270	2.00	0.50	mg/L
7440-09-7	Potassium	68.6	5.00	1.25	mg/L
7440-62-2	Vanadium	0.63	0.20	0.050	mg/L

EPA 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	Sodium	10500	100	25.0	mg/L

EPA 300.0

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	11.9	10.0	2.50	mg/L

SM 2540 C-2011

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	37200	100	43.9	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061104	**SD08-MW12**	Water	11/04/2013 15:05	11/06/2013 10:30

EPA 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-70-2	Calcium	593	8.00	2.00	mg/L
7440-50-8	Copper	0.37	0.20	0.050	mg/L
7439-95-4	Magnesium	2890	2.00	0.50	mg/L
7439-96-5	Manganese	0.066J	0.15	0.038	mg/L
7440-09-7	Potassium	85.1	5.00	1.25	mg/L
7440-62-2	Vanadium	0.60	0.20	0.050	mg/L

EPA 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	Sodium	15300	100	25.0	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061104	**SD08-MW12**	Water	11/04/2013 15:05	11/06/2013 10:30

SM 2540 C-2011

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	59200	100	43.9	mg/L

EPA 300.0

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	21.7	20.0	5.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061105	**MW-08-06**	Water	11/05/2013 08:00	11/06/2013 10:30

EPA 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.072J	0.20	0.050	mg/L
7440-70-2	Calcium	494	8.00	2.00	mg/L
7440-50-8	Copper	0.26	0.20	0.050	mg/L
7439-95-4	Magnesium	838	2.00	0.50	mg/L
7440-09-7	Potassium	23.5	5.00	1.25	mg/L
7440-23-5	Sodium	4560	10.0	2.50	mg/L
7440-62-2	Vanadium	0.55	0.20	0.050	mg/L
7440-66-6	Zinc	0.16J	0.20	0.050	mg/L

SM 2540 C-2011

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	17600	100	43.9	mg/L

EPA 300.0

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	16.7	10.0	2.50	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061106	**MW-08-06-MS**	Water	11/05/2013 08:00	11/06/2013 10:30

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	4.82	2.00	0.50	mg/L
7440-36-0	Antimony	0.58J	0.60	0.15	mg/L
7440-38-2	Arsenic	0.47	0.20	0.050	mg/L
7440-39-3	Barium	0.19	0.10	0.025	mg/L
7440-41-7	Beryllium	0.49	0.040	0.010	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061106	**MW-08-06-MS**	Water	11/05/2013 08:00	11/06/2013 10:30

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-43-9	Cadmium	0.50	0.050	0.013	mg/L
7440-70-2	Calcium	503	8.00	2.00	mg/L
7440-47-3	Chromium	0.52	0.10	0.025	mg/L
7440-48-4	Cobalt	0.49	0.10	0.025	mg/L
7440-50-8	Copper	0.73	0.20	0.050	mg/L
7439-89-6	Iron	5.00	2.00	0.50	mg/L
7439-92-1	Lead	0.40	0.15	0.038	mg/L
7439-95-4	Magnesium	845	2.00	0.50	mg/L
7439-96-5	Manganese	0.52	0.15	0.038	mg/L
7440-02-0	Nickel	0.52	0.40	0.10	mg/L
7440-09-7	Potassium	34.5	5.00	1.25	mg/L
7782-49-2	Selenium	0.51	0.40	0.10	mg/L
7440-22-4	Silver	0.39	0.10	0.025	mg/L
7440-23-5	Sodium	4640	10.0	2.50	mg/L
7440-28-0	Thallium	0.53	0.20	0.050	mg/L
7440-62-2	Vanadium	1.06	0.20	0.050	mg/L
7440-66-6	Zinc	0.47	0.20	0.050	mg/L

EPA 7470A

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.0033	0.00020	0.000070	mg/L

SW-846 7470A Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.0031	0.00020	0.000070	mg/L

EPA 300.0 Inorganic Anions

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	129	10.0	2.50	mg/L

SW-846 8260B Water

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	53.5	5.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	57.9	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	51.0	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	53.5	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	57.0	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	59.4	5.00	0.208	ug/L
563-58-6	1,1-Dichloropropene	53.4	5.00	0.052	ug/L
96-18-4	1,2,3-Trichloropropane	51.2	5.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	43.3	5.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	48.0	5.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	49.7	5.00	0.194	ug/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061106	**MW-08-06-MS**	Water	11/05/2013 08:00	11/06/2013 10:30

SW-846 8260B Water

CAS#	Parameter	Result	RDL	MDL	Units
106-93-4	1,2-Dibromoethane	51.2	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	50.1	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	55.5	5.00	0.116	ug/L
540-59-0	1,2-Dichloroethene(Total)	113	10.0	0.180	ug/L
78-87-5	1,2-Dichloropropane	56.2	5.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	47.6	5.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	52.0	5.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	51.5	5.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	48.7	5.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	56.4	5.00	0.170	ug/L
78-93-3	2-Butanone	43.3	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	52.7	5.00	0.080	ug/L
591-78-6	2-Hexanone	42.3	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	53.8	5.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	47.8	5.00	0.070	ug/L
108-10-1	4-Methyl-2-pentanone	54.9	5.00	0.120	ug/L
67-64-1	Acetone	29.2	5.00	0.193	ug/L
71-43-2	Benzene	58.5	5.00	0.111	ug/L
108-86-1	Bromobenzene	52.5	5.00	0.145	ug/L
74-97-5	Bromochloromethane	60.6	5.00	0.127	ug/L
75-27-4	Bromodichloromethane	54.0	5.00	0.083	ug/L
75-25-2	Bromoform	49.2	5.00	0.215	ug/L
74-83-9	Bromomethane	38.4	5.00	0.427	ug/L
75-15-0	Carbon disulfide	55.7	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	58.3	5.00	0.248	ug/L
108-90-7	Chlorobenzene	51.0	5.00	0.083	ug/L
75-00-3	Chloroethane	53.2	5.00	0.235	ug/L
67-66-3	Chloroform	56.2	5.00	0.155	ug/L
74-87-3	Chloromethane	50.5	5.00	0.144	ug/L
124-48-1	Dibromochloromethane	50.9	5.00	0.054	ug/L
74-95-3	Dibromomethane	53.8	5.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	56.9	5.00	0.145	ug/L
100-41-4	Ethylbenzene	55.4	5.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	51.2	5.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	48.1	5.00	0.130	ug/L
74-88-4	Methyl iodide	37.4	5.00	0.084	ug/L
75-09-2	Methylene chloride	53.9	5.00	0.149	ug/L
91-20-3	Naphthalene	41.8	5.00	0.176	ug/L
100-42-5	Styrene	47.6	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	54.8	5.00	0.193	ug/L
108-88-3	Toluene	51.4	5.00	0.122	ug/L
79-01-6	Trichloroethene	56.5	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	71.5	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	58.4	5.00	0.158	ug/L
75-01-4	Vinyl chloride	55.9	5.00	0.127	ug/L
1330-20-7	Xylene (total)	145	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	55.7	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	49.8	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	97.0	10.0	0.123	ug/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061106	**MW-08-06-MS**	Water	11/05/2013 08:00	11/06/2013 10:30

SW-846 8260B Water

CAS#	Parameter	Result	RDL	MDL	Units
104-51-8	n-Butylbenzene	46.3	5.00	0.123	ug/L
103-65-1	n-Propylbenzene	48.4	5.00	0.727	ug/L
95-47-6	o-Xylene	47.8	5.00	0.055	ug/L
135-98-8	sec-Butylbenzene	48.6	5.00	0.107	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	60.6	5.00	0.078	ug/L
98-06-6	tert-Butylbenzene	48.1	5.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	57.2	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	51.0	5.00	0.128	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	63.0	5.00	0.264	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061107	**MW-08-06-MSD**	Water	11/05/2013 08:00	11/06/2013 10:30

SW-846 7470A Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.0032	0.00020	0.000070	mg/L

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	4.76	2.00	0.50	mg/L
7440-36-0	Antimony	0.58J	0.60	0.15	mg/L
7440-38-2	Arsenic	0.58	0.20	0.050	mg/L
7440-39-3	Barium	0.14	0.10	0.025	mg/L
7440-41-7	Beryllium	0.50	0.040	0.010	mg/L
7440-43-9	Cadmium	0.50	0.050	0.013	mg/L
7440-70-2	Calcium	500	8.00	2.00	mg/L
7440-47-3	Chromium	0.52	0.10	0.025	mg/L
7440-48-4	Cobalt	0.49	0.10	0.025	mg/L
7440-50-8	Copper	0.74	0.20	0.050	mg/L
7439-89-6	Iron	5.17	2.00	0.50	mg/L
7439-92-1	Lead	0.41	0.15	0.038	mg/L
7439-95-4	Magnesium	849	2.00	0.50	mg/L
7439-96-5	Manganese	0.52	0.15	0.038	mg/L
7440-02-0	Nickel	0.53	0.40	0.10	mg/L
7440-09-7	Potassium	34.9	5.00	1.25	mg/L
7782-49-2	Selenium	0.52	0.40	0.10	mg/L
7440-22-4	Silver	0.39	0.10	0.025	mg/L
7440-23-5	Sodium	4740	10.0	2.50	mg/L
7440-28-0	Thallium	0.48	0.20	0.050	mg/L
7440-62-2	Vanadium	1.08	0.20	0.050	mg/L
7440-66-6	Zinc	0.48	0.20	0.050	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061107	**MW-08-06-MSD**	Water	11/05/2013 08:00	11/06/2013 10:30

EPA 7470A

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.0034	0.00020	0.000070	mg/L

EPA 300.0 Inorganic Anions

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	128	10.0	2.50	mg/L

SW-846 8260B Water

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	52.4	5.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	55.1	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	54.1	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	54.4	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	53.8	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	55.9	5.00	0.208	ug/L
563-58-6	1,1-Dichloropropene	50.2	5.00	0.052	ug/L
96-18-4	1,2,3-Trichloropropane	54.3	5.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	47.6	5.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	46.9	5.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	53.5	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	53.4	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	50.2	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	53.4	5.00	0.116	ug/L
540-59-0	1,2-Dichloroethene(Total)	109	10.0	0.180	ug/L
78-87-5	1,2-Dichloropropane	53.8	5.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	47.2	5.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	51.5	5.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	52.9	5.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	48.1	5.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	53.0	5.00	0.170	ug/L
78-93-3	2-Butanone	45.4	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	52.1	5.00	0.080	ug/L
591-78-6	2-Hexanone	47.9	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	53.3	5.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	47.9	5.00	0.070	ug/L
108-10-1	4-Methyl-2-pentanone	58.2	5.00	0.120	ug/L
67-64-1	Acetone	30.8	5.00	0.193	ug/L
71-43-2	Benzene	54.1	5.00	0.111	ug/L
108-86-1	Bromobenzene	51.6	5.00	0.145	ug/L
74-97-5	Bromochloromethane	55.5	5.00	0.127	ug/L
75-27-4	Bromodichloromethane	51.4	5.00	0.083	ug/L
75-25-2	Bromoform	50.7	5.00	0.215	ug/L
74-83-9	Bromomethane	41.6	5.00	0.427	ug/L
75-15-0	Carbon disulfide	52.5	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	55.2	5.00	0.248	ug/L
108-90-7	Chlorobenzene	50.2	5.00	0.083	ug/L
75-00-3	Chloroethane	48.8	5.00	0.235	ug/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061107	**MW-08-06-MSD**	Water	11/05/2013 08:00	11/06/2013 10:30

SW-846 8260B Water

CAS#	Parameter	Result	RDL	MDL	Units
67-66-3	Chloroform	52.3	5.00	0.155	ug/L
74-87-3	Chloromethane	50.6	5.00	0.144	ug/L
124-48-1	Dibromochloromethane	52.2	5.00	0.054	ug/L
74-95-3	Dibromomethane	52.6	5.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	54.4	5.00	0.145	ug/L
100-41-4	Ethylbenzene	53.6	5.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	52.9	5.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	47.8	5.00	0.130	ug/L
74-88-4	Methyl iodide	38.6	5.00	0.084	ug/L
75-09-2	Methylene chloride	51.6	5.00	0.149	ug/L
91-20-3	Naphthalene	49.3	5.00	0.176	ug/L
100-42-5	Styrene	46.1	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	52.7	5.00	0.193	ug/L
108-88-3	Toluene	49.6	5.00	0.122	ug/L
79-01-6	Trichloroethene	53.7	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	65.9	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	54.0	5.00	0.158	ug/L
75-01-4	Vinyl chloride	54.0	5.00	0.127	ug/L
1330-20-7	Xylene (total)	144	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	53.9	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	48.0	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	96.5	10.0	0.123	ug/L
104-51-8	n-Butylbenzene	46.7	5.00	0.123	ug/L
103-65-1	n-Propylbenzene	47.5	5.00	0.727	ug/L
95-47-6	o-Xylene	47.1	5.00	0.055	ug/L
135-98-8	sec-Butylbenzene	48.2	5.00	0.107	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	59.9	5.00	0.078	ug/L
98-06-6	tert-Butylbenzene	47.7	5.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	55.2	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	48.9	5.00	0.128	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	70.5	5.00	0.264	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061108	**MW-08-04**	Water	11/05/2013 09:50	11/06/2013 10:30

EPA 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.0074J	0.020	0.0050	mg/L
7440-39-3	Barium	0.011	0.010	0.0025	mg/L
7440-70-2	Calcium	489	0.80	0.20	mg/L
7440-47-3	Chromium	0.015	0.010	0.0025	mg/L
7440-48-4	Cobalt	0.0034J	0.010	0.0025	mg/L
7439-95-4	Magnesium	280	0.20	0.050	mg/L
7439-96-5	Manganese	0.0044J	0.015	0.0038	mg/L
7440-09-7	Potassium	18.4	0.50	0.13	mg/L
7440-23-5	Sodium	512	1.00	0.25	mg/L
7440-62-2	Vanadium	0.047	0.020	0.0050	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061108	**MW-08-04**	Water	11/05/2013 09:50	11/06/2013 10:30

EPA 300.0

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	3.90	1.00	0.250	mg/L

SM 2540 C-2011

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	3080	10.0	4.39	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061109	**MW-08-05**	Water	11/05/2013 10:50	11/06/2013 10:30

EPA 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.019	0.010	0.0025	mg/L
7440-70-2	Calcium	616	0.80	0.20	mg/L
7440-48-4	Cobalt	0.0041J	0.010	0.0025	mg/L
7439-89-6	Iron	1.31	0.20	0.050	mg/L
7439-92-1	Lead	0.0062J	0.015	0.0038	mg/L
7439-95-4	Magnesium	49.3	0.20	0.050	mg/L
7439-96-5	Manganese	0.13	0.015	0.0038	mg/L
7440-09-7	Potassium	7.21	0.50	0.13	mg/L
7440-23-5	Sodium	22.2	1.00	0.25	mg/L
7440-62-2	Vanadium	0.013J	0.020	0.0050	mg/L

SM 2540 C-2011

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	2510	10.0	4.39	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061110	**S10-MW01**	Water	11/05/2013 11:55	11/06/2013 10:30

EPA 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-70-2	Calcium	488	8.00	2.00	mg/L
7440-50-8	Copper	0.21	0.20	0.050	mg/L
7439-95-4	Magnesium	528	2.00	0.50	mg/L
7439-96-5	Manganese	0.28	0.15	0.038	mg/L
7440-09-7	Potassium	16.4	5.00	1.25	mg/L
7440-23-5	Sodium	2580	10.0	2.50	mg/L
7440-62-2	Vanadium	0.53	0.20	0.050	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061110	**S10-MW01**	Water	11/05/2013 11:55	11/06/2013 10:30

SM 2540 C-2011

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	**Total Dissolved Solids(TDS)**	**11000**	**10.0**	**4.39**	**mg/L**

EPA 300.0

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	**Nitrate**	**5.62**	**4.00**	**1.00**	**mg/L**

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
107-06-2	**1,2-Dichloroethane**	**22.0**	**5.00**	**0.116**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061111	**TRIP BLANK**	Water	11/04/2013 00:00	11/06/2013 10:30

SW-846 8260B Water

CAS#	Parameter	Result	RDL	MDL	Units
75-09-2	**Methylene chloride**	**1.51J**	**5.00**	**0.149**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061101	**S10-MW6**	Water	11/04/2013 12:30	11/06/2013 10:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/08/2013 10:57	LBH	519587

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	5.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
563-58-6	1,1-Dichloropropene	0.052U	5.00	0.052	ug/L
96-18-4	1,2,3-Trichloropropane	0.065U	5.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.084U	5.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
540-59-0	1,2-Dichloroethene(Total)	0.180U	10.0	0.180	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.066U	5.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	0.059U	5.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	0.170U	5.00	0.170	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	0.080U	5.00	0.080	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	0.124U	5.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	0.070U	5.00	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	5.00	0.111	ug/L
108-86-1	Bromobenzene	0.145U	5.00	0.145	ug/L
74-97-5	Bromochloromethane	0.127U	5.00	0.127	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
74-95-3	Dibromomethane	0.211U	5.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	0.265U	5.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
74-88-4	Methyl iodide	0.084U	5.00	0.084	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
91-20-3	Naphthalene	0.176U	5.00	0.176	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061101	**S10-MW6**	Water	11/04/2013 12:30	11/06/2013 10:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/08/2013 10:57	LBH	519587

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	0.193U	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	0.161U	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
104-51-8	n-Butylbenzene	0.123U	5.00	0.123	ug/L
103-65-1	n-Propylbenzene	0.727U	5.00	0.727	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
135-98-8	sec-Butylbenzene	0.107U	5.00	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	5.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	0.264U	5.00	0.264	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	49.4	ug/L	99	84 - 120
1868-53-7	Dibromofluoromethane	50	49.5	ug/L	99	87 - 116
2037-26-5	Toluene d8	50	53.5	ug/L	107	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	53.2	ug/L	106	76 - 127

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/06/2013 13:50	519415	EPA 7470A Dissolved	1	11/11/2013 16:17	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000070U	0.00020	0.000070	mg/L

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/06/2013 13:50	519414	EPA 7470A	1	11/11/2013 13:54	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000070U	0.00020	0.000070	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061101	**S10-MW6**	Water	11/04/2013 12:30	11/06/2013 10:30

EPA 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/06/2013 12:30	519409	EPA 3005 Dissolved	10	11/13/2013 20:25	CMB	519915

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	0.50U	2.00	0.50	mg/L
7440-36-0	Antimony	0.15U	0.60	0.15	mg/L
7440-38-2	Arsenic	0.050U	0.20	0.050	mg/L
7440-39-3	Barium	0.025U	0.10	0.025	mg/L
7440-41-7	Beryllium	0.010U	0.040	0.010	mg/L
7440-43-9	Cadmium	0.013U	0.050	0.013	mg/L
7440-70-2	**Calcium**	**435**	**8.00**	**2.00**	**mg/L**
7440-47-3	Chromium	0.025U	0.10	0.025	mg/L
7440-48-4	Cobalt	0.025U	0.10	0.025	mg/L
7440-50-8	**Copper**	**0.18J**	**0.20**	**0.050**	**mg/L**
7439-89-6	Iron	0.50U	2.00	0.50	mg/L
7439-92-1	Lead	0.038U	0.15	0.038	mg/L
7439-95-4	**Magnesium**	**598**	**2.00**	**0.50**	**mg/L**
7439-96-5	**Manganese**	**0.15**	**0.15**	**0.038**	**mg/L**
7440-02-0	Nickel	0.10U	0.40	0.10	mg/L
7440-09-7	**Potassium**	**32.5**	**5.00**	**1.25**	**mg/L**
7782-49-2	Selenium	0.10U	0.40	0.10	mg/L
7440-22-4	Silver	0.025U	0.10	0.025	mg/L
7440-23-5	**Sodium**	**3320**	**10.0**	**2.50**	**mg/L**
7440-28-0	Thallium	0.050U	0.20	0.050	mg/L
7440-62-2	**Vanadium**	**0.49**	**0.20**	**0.050**	**mg/L**
7440-66-6	Zinc	0.050U	0.20	0.050	mg/L

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/07/2013 14:50	BNW	519497

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	**Total Dissolved Solids(TDS)**	**15400**	**10.0**	**4.39**	**mg/L**

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			20	11/06/2013 16:57	JEM	519406

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	**Nitrate**	**43.2**	**4.00**	**1.00**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061102	**SD08-MW13**	Water	11/04/2013 13:50	11/06/2013 10:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/08/2013 11:17	LBH	519587

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	5.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
563-58-6	1,1-Dichloropropene	0.052U	5.00	0.052	ug/L
96-18-4	1,2,3-Trichloropropane	0.065U	5.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.084U	5.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
540-59-0	1,2-Dichloroethene(Total)	0.180U	10.0	0.180	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.066U	5.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	0.059U	5.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	0.170U	5.00	0.170	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	0.080U	5.00	0.080	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	0.124U	5.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	0.070U	5.00	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	5.00	0.111	ug/L
108-86-1	Bromobenzene	0.145U	5.00	0.145	ug/L
74-97-5	Bromochloromethane	0.127U	5.00	0.127	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
74-95-3	Dibromomethane	0.211U	5.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	0.265U	5.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
74-88-4	Methyl iodide	0.084U	5.00	0.084	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
91-20-3	Naphthalene	0.176U	5.00	0.176	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061102	**SD08-MW13**	Water	11/04/2013 13:50	11/06/2013 10:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/08/2013 11:17	LBH	519587

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	0.193U	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	0.161U	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
104-51-8	n-Butylbenzene	0.123U	5.00	0.123	ug/L
103-65-1	n-Propylbenzene	0.727U	5.00	0.727	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
135-98-8	sec-Butylbenzene	0.107U	5.00	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	5.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	0.264U	5.00	0.264	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	47.8	ug/L	96	84 - 120
1868-53-7	Dibromofluoromethane	50	48.1	ug/L	96	87 - 116
2037-26-5	Toluene d8	50	53	ug/L	106	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	51.7	ug/L	103	76 - 127

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/06/2013 13:50	519415	EPA 7470A Dissolved	1	11/11/2013 16:18	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000070U	0.00020	0.000070	mg/L

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/06/2013 13:50	519414	EPA 7470A	1	11/11/2013 13:56	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000070U	0.00020	0.000070	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061102	**SD08-MW13**	Water	11/04/2013 13:50	11/06/2013 10:30

EPA 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/06/2013 12:30	519409	EPA 3005 Dissolved	10	11/13/2013 20:33	CMB	519915

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	0.50U	2.00	0.50	mg/L
7440-36-0	Antimony	0.15U	0.60	0.15	mg/L
7440-38-2	Arsenic	0.050U	0.20	0.050	mg/L
7440-39-3	Barium	0.025U	0.10	0.025	mg/L
7440-41-7	Beryllium	0.010U	0.040	0.010	mg/L
7440-43-9	Cadmium	0.013U	0.050	0.013	mg/L
7440-70-2	**Calcium**	**655**	**8.00**	**2.00**	**mg/L**
7440-47-3	Chromium	0.025U	0.10	0.025	mg/L
7440-48-4	Cobalt	0.025U	0.10	0.025	mg/L
7440-50-8	**Copper**	**0.35**	**0.20**	**0.050**	**mg/L**
7439-89-6	Iron	0.50U	2.00	0.50	mg/L
7439-92-1	Lead	0.038U	0.15	0.038	mg/L
7439-95-4	**Magnesium**	**2200**	**2.00**	**0.50**	**mg/L**
7439-96-5	Manganese	0.038U	0.15	0.038	mg/L
7440-02-0	Nickel	0.10U	0.40	0.10	mg/L
7440-09-7	**Potassium**	**67.0**	**5.00**	**1.25**	**mg/L**
7782-49-2	Selenium	0.10U	0.40	0.10	mg/L
7440-22-4	Silver	0.025U	0.10	0.025	mg/L
7440-28-0	Thallium	0.050U	0.20	0.050	mg/L
7440-62-2	**Vanadium**	**0.63**	**0.20**	**0.050**	**mg/L**
7440-66-6	Zinc	0.050U	0.20	0.050	mg/L

EPA 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/06/2013 12:30	519409	EPA 3005 Dissolved	100	11/15/2013 14:34	CMB	520112

CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	**Sodium**	**10600**	**100**	**25.0**	**mg/L**

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	11/11/2013 17:18	BNW	519786

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	**Total Dissolved Solids(TDS)**	**33500**	**100**	**43.9**	**mg/L**

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			50	11/06/2013 17:15	JEM	519406

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	**Nitrate**	**12.9**	**10.0**	**2.50**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061103	**SD08-MW13A**	Water	11/04/2013 13:50	11/06/2013 10:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/08/2013 11:36	LBH	519587

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	5.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
563-58-6	1,1-Dichloropropene	0.052U	5.00	0.052	ug/L
96-18-4	1,2,3-Trichloropropane	0.065U	5.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.084U	5.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
540-59-0	1,2-Dichloroethene(Total)	0.180U	10.0	0.180	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.066U	5.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	0.059U	5.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	0.170U	5.00	0.170	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	0.080U	5.00	0.080	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	0.124U	5.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	0.070U	5.00	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	5.00	0.111	ug/L
108-86-1	Bromobenzene	0.145U	5.00	0.145	ug/L
74-97-5	Bromochloromethane	0.127U	5.00	0.127	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
74-95-3	Dibromomethane	0.211U	5.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	0.265U	5.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
74-88-4	Methyl iodide	0.084U	5.00	0.084	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
91-20-3	Naphthalene	0.176U	5.00	0.176	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061103	**SD08-MW13A**	Water	11/04/2013 13:50	11/06/2013 10:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/08/2013 11:36	LBH	519587

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	0.193U	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	0.161U	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
104-51-8	n-Butylbenzene	0.123U	5.00	0.123	ug/L
103-65-1	n-Propylbenzene	0.727U	5.00	0.727	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
135-98-8	sec-Butylbenzene	0.107U	5.00	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	5.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	0.264U	5.00	0.264	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	50.3	ug/L	101	84 - 120
1868-53-7	Dibromofluoromethane	50	51	ug/L	102	87 - 116
2037-26-5	Toluene d8	50	51.8	ug/L	104	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	53.9	ug/L	108	76 - 127

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/06/2013 13:50	519415	EPA 7470A Dissolved	1	11/11/2013 16:20	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000070U	0.00020	0.000070	mg/L

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/06/2013 13:50	519414	EPA 7470A	1	11/11/2013 13:58	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000070U	0.00020	0.000070	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061103	**SD08-MW13A**	Water	11/04/2013 13:50	11/06/2013 10:30

EPA 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/06/2013 12:30	519409	EPA 3005 Dissolved	10	11/13/2013 20:39	CMB	519915

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	0.50U	2.00	0.50	mg/L
7440-36-0	Antimony	0.15U	0.60	0.15	mg/L
7440-38-2	Arsenic	0.050U	0.20	0.050	mg/L
7440-39-3	Barium	0.025U	0.10	0.025	mg/L
7440-41-7	Beryllium	0.010U	0.040	0.010	mg/L
7440-43-9	Cadmium	0.013U	0.050	0.013	mg/L
7440-70-2	**Calcium**	**674**	**8.00**	**2.00**	**mg/L**
7440-47-3	Chromium	0.025U	0.10	0.025	mg/L
7440-48-4	Cobalt	0.025U	0.10	0.025	mg/L
7440-50-8	**Copper**	**0.32**	**0.20**	**0.050**	**mg/L**
7439-89-6	Iron	0.50U	2.00	0.50	mg/L
7439-92-1	Lead	0.038U	0.15	0.038	mg/L
7439-95-4	**Magnesium**	**2270**	**2.00**	**0.50**	**mg/L**
7439-96-5	Manganese	0.038U	0.15	0.038	mg/L
7440-02-0	Nickel	0.10U	0.40	0.10	mg/L
7440-09-7	**Potassium**	**68.6**	**5.00**	**1.25**	**mg/L**
7782-49-2	Selenium	0.10U	0.40	0.10	mg/L
7440-22-4	Silver	0.025U	0.10	0.025	mg/L
7440-28-0	Thallium	0.050U	0.20	0.050	mg/L
7440-62-2	**Vanadium**	**0.63**	**0.20**	**0.050**	**mg/L**
7440-66-6	Zinc	0.050U	0.20	0.050	mg/L

EPA 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/06/2013 12:30	519409	EPA 3005 Dissolved	100	11/15/2013 14:40	CMB	520112

CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	**Sodium**	**10500**	**100**	**25.0**	**mg/L**

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	11/11/2013 17:18	BNW	519786

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	**Total Dissolved Solids(TDS)**	**37200**	**100**	**43.9**	**mg/L**

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			50	11/06/2013 17:32	JEM	519406

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	**Nitrate**	**11.9**	**10.0**	**2.50**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061104	**SD08-MW12**	Water	11/04/2013 15:05	11/06/2013 10:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/08/2013 12:56	CLH	519587

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	5.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
563-58-6	1,1-Dichloropropene	0.052U	5.00	0.052	ug/L
96-18-4	1,2,3-Trichloropropane	0.065U	5.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.084U	5.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
540-59-0	1,2-Dichloroethene(Total)	0.180U	10.0	0.180	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.066U	5.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	0.059U	5.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	0.170U	5.00	0.170	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	0.080U	5.00	0.080	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	0.124U	5.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	0.070U	5.00	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	5.00	0.111	ug/L
108-86-1	Bromobenzene	0.145U	5.00	0.145	ug/L
74-97-5	Bromochloromethane	0.127U	5.00	0.127	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
74-95-3	Dibromomethane	0.211U	5.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	0.265U	5.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
74-88-4	Methyl iodide	0.084U	5.00	0.084	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
91-20-3	Naphthalene	0.176U	5.00	0.176	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061104	**SD08-MW12**	Water	11/04/2013 15:05	11/06/2013 10:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/08/2013 12:56	CLH	519587

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	0.193U	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	0.161U	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
104-51-8	n-Butylbenzene	0.123U	5.00	0.123	ug/L
103-65-1	n-Propylbenzene	0.727U	5.00	0.727	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
135-98-8	sec-Butylbenzene	0.107U	5.00	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	5.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	0.264U	5.00	0.264	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	49.9	ug/L	100	84 - 120
1868-53-7	Dibromofluoromethane	50	51.8	ug/L	104	87 - 116
2037-26-5	Toluene d8	50	51.2	ug/L	102	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	54.4	ug/L	109	76 - 127

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/06/2013 13:50	519415	EPA 7470A Dissolved	1	11/11/2013 16:22	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000070U	0.00020	0.000070	mg/L

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/06/2013 13:50	519414	EPA 7470A	1	11/11/2013 14:00	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000070U	0.00020	0.000070	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061104	**SD08-MW12**	Water	11/04/2013 15:05	11/06/2013 10:30

EPA 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/06/2013 12:30	519409	EPA 3005 Dissolved	10	11/13/2013 20:46	CMB	519915

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	0.50U	2.00	0.50	mg/L
7440-36-0	Antimony	0.15U	0.60	0.15	mg/L
7440-38-2	Arsenic	0.050U	0.20	0.050	mg/L
7440-39-3	Barium	0.025U	0.10	0.025	mg/L
7440-41-7	Beryllium	0.010U	0.040	0.010	mg/L
7440-43-9	Cadmium	0.013U	0.050	0.013	mg/L
7440-70-2	**Calcium**	**593**	**8.00**	**2.00**	**mg/L**
7440-47-3	Chromium	0.025U	0.10	0.025	mg/L
7440-48-4	Cobalt	0.025U	0.10	0.025	mg/L
7440-50-8	**Copper**	**0.37**	**0.20**	**0.050**	**mg/L**
7439-89-6	Iron	0.50U	2.00	0.50	mg/L
7439-92-1	Lead	0.038U	0.15	0.038	mg/L
7439-95-4	**Magnesium**	**2890**	**2.00**	**0.50**	**mg/L**
7439-96-5	**Manganese**	**0.066J**	**0.15**	**0.038**	**mg/L**
7440-02-0	Nickel	0.10U	0.40	0.10	mg/L
7440-09-7	**Potassium**	**85.1**	**5.00**	**1.25**	**mg/L**
7782-49-2	Selenium	0.10U	0.40	0.10	mg/L
7440-22-4	Silver	0.025U	0.10	0.025	mg/L
7440-28-0	Thallium	0.050U	0.20	0.050	mg/L
7440-62-2	**Vanadium**	**0.60**	**0.20**	**0.050**	**mg/L**
7440-66-6	Zinc	0.050U	0.20	0.050	mg/L

EPA 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/06/2013 12:30	519409	EPA 3005 Dissolved	100	11/15/2013 14:47	CMB	520112

CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	**Sodium**	**15300**	**100**	**25.0**	**mg/L**

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	11/07/2013 14:50	BNW	519497

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	**Total Dissolved Solids(TDS)**	**59200**	**100**	**43.9**	**mg/L**

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			100	11/06/2013 17:50	JEM	519406

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	**Nitrate**	**21.7**	**20.0**	**5.00**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061105	**MW-08-06**	Water	11/05/2013 08:00	11/06/2013 10:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/08/2013 10:37	LBH	519587

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	5.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
563-58-6	1,1-Dichloropropene	0.052U	5.00	0.052	ug/L
96-18-4	1,2,3-Trichloropropane	0.065U	5.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.084U	5.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
540-59-0	1,2-Dichloroethene(Total)	0.180U	10.0	0.180	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.066U	5.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	0.059U	5.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	0.170U	5.00	0.170	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	0.080U	5.00	0.080	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	0.124U	5.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	0.070U	5.00	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	5.00	0.111	ug/L
108-86-1	Bromobenzene	0.145U	5.00	0.145	ug/L
74-97-5	Bromochloromethane	0.127U	5.00	0.127	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
74-95-3	Dibromomethane	0.211U	5.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	0.265U	5.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
74-88-4	Methyl iodide	0.084U	5.00	0.084	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
91-20-3	Naphthalene	0.176U	5.00	0.176	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061105	**MW-08-06**	Water	11/05/2013 08:00	11/06/2013 10:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/08/2013 10:37	LBH	519587

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	0.193U	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	0.161U	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
104-51-8	n-Butylbenzene	0.123U	5.00	0.123	ug/L
103-65-1	n-Propylbenzene	0.727U	5.00	0.727	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
135-98-8	sec-Butylbenzene	0.107U	5.00	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	5.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	0.264U	5.00	0.264	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	48.7	ug/L	97	84 - 120
1868-53-7	Dibromofluoromethane	50	49.9	ug/L	100	87 - 116
2037-26-5	Toluene d8	50	51.9	ug/L	104	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	51.9	ug/L	104	76 - 127

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/06/2013 13:50	519415	EPA 7470A Dissolved	1	11/11/2013 16:27	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000070U	0.00020	0.000070	mg/L

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/06/2013 13:50	519414	EPA 7470A	1	11/11/2013 13:40	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000070U	0.00020	0.000070	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061105	**MW-08-06**	Water	11/05/2013 08:00	11/06/2013 10:30

EPA 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/06/2013 12:30	519409	EPA 3005 Dissolved	10	11/13/2013 19:34	CMB	519915

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	0.50U	2.00	0.50	mg/L
7440-36-0	Antimony	0.15U	0.60	0.15	mg/L
7440-38-2	**Arsenic**	**0.072J**	**0.20**	**0.050**	**mg/L**
7440-39-3	Barium	0.025U	0.10	0.025	mg/L
7440-41-7	Beryllium	0.010U	0.040	0.010	mg/L
7440-43-9	Cadmium	0.013U	0.050	0.013	mg/L
7440-70-2	**Calcium**	**494**	**8.00**	**2.00**	**mg/L**
7440-47-3	Chromium	0.025U	0.10	0.025	mg/L
7440-48-4	Cobalt	0.025U	0.10	0.025	mg/L
7440-50-8	**Copper**	**0.26**	**0.20**	**0.050**	**mg/L**
7439-89-6	Iron	0.50U	2.00	0.50	mg/L
7439-92-1	Lead	0.038U	0.15	0.038	mg/L
7439-95-4	**Magnesium**	**838**	**2.00**	**0.50**	**mg/L**
7439-96-5	Manganese	0.038U	0.15	0.038	mg/L
7440-02-0	Nickel	0.10U	0.40	0.10	mg/L
7440-09-7	**Potassium**	**23.5**	**5.00**	**1.25**	**mg/L**
7782-49-2	Selenium	0.10U	0.40	0.10	mg/L
7440-22-4	Silver	0.025U	0.10	0.025	mg/L
7440-23-5	**Sodium**	**4560**	**10.0**	**2.50**	**mg/L**
7440-28-0	Thallium	0.050U	0.20	0.050	mg/L
7440-62-2	**Vanadium**	**0.55**	**0.20**	**0.050**	**mg/L**
7440-66-6	**Zinc**	**0.16J**	**0.20**	**0.050**	**mg/L**

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	11/09/2013 13:51	BNW	519691

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	**Total Dissolved Solids(TDS)**	**17600**	**100**	**43.9**	**mg/L**

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			50	11/06/2013 18:08	JEM	519406

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	**Nitrate**	**16.7**	**10.0**	**2.50**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061106	**MW-08-06-MS**	Water	11/05/2013 08:00	11/06/2013 10:30

SW-846 8260B Water

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/08/2013 16:15	LBH	519587

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	53.5	5.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	57.9	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	51.0	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	53.5	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	57.0	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	59.4	5.00	0.208	ug/L
563-58-6	1,1-Dichloropropene	53.4	5.00	0.052	ug/L
96-18-4	1,2,3-Trichloropropane	51.2	5.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	43.3	5.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	48.0	5.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	49.7	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	51.2	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	50.1	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	55.5	5.00	0.116	ug/L
540-59-0	1,2-Dichloroethene(Total)	113	10.0	0.180	ug/L
78-87-5	1,2-Dichloropropane	56.2	5.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	47.6	5.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	52.0	5.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	51.5	5.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	48.7	5.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	56.4	5.00	0.170	ug/L
78-93-3	2-Butanone	43.3	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	52.7	5.00	0.080	ug/L
591-78-6	2-Hexanone	42.3	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	53.8	5.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	47.8	5.00	0.070	ug/L
108-10-1	4-Methyl-2-pentanone	54.9	5.00	0.120	ug/L
67-64-1	Acetone	29.2	5.00	0.193	ug/L
71-43-2	Benzene	58.5	5.00	0.111	ug/L
108-86-1	Bromobenzene	52.5	5.00	0.145	ug/L
74-97-5	Bromochloromethane	60.6	5.00	0.127	ug/L
75-27-4	Bromodichloromethane	54.0	5.00	0.083	ug/L
75-25-2	Bromoform	49.2	5.00	0.215	ug/L
74-83-9	Bromomethane	38.4	5.00	0.427	ug/L
75-15-0	Carbon disulfide	55.7	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	58.3	5.00	0.248	ug/L
108-90-7	Chlorobenzene	51.0	5.00	0.083	ug/L
75-00-3	Chloroethane	53.2	5.00	0.235	ug/L
67-66-3	Chloroform	56.2	5.00	0.155	ug/L
74-87-3	Chloromethane	50.5	5.00	0.144	ug/L
124-48-1	Dibromochloromethane	50.9	5.00	0.054	ug/L
74-95-3	Dibromomethane	53.8	5.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	56.9	5.00	0.145	ug/L
100-41-4	Ethylbenzene	55.4	5.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	51.2	5.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	48.1	5.00	0.130	ug/L
74-88-4	Methyl iodide	37.4	5.00	0.084	ug/L
75-09-2	Methylene chloride	53.9	5.00	0.149	ug/L
91-20-3	Naphthalene	41.8	5.00	0.176	ug/L
100-42-5	Styrene	47.6	5.00	0.089	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061106	**MW-08-06-MS**	Water	11/05/2013 08:00	11/06/2013 10:30

SW-846 8260B Water

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/08/2013 16:15	LBH	519587

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	**Tetrachloroethene**	**54.8**	**5.00**	**0.193**	**ug/L**
108-88-3	**Toluene**	**51.4**	**5.00**	**0.122**	**ug/L**
79-01-6	**Trichloroethene**	**56.5**	**5.00**	**0.161**	**ug/L**
75-69-4	**Trichlorofluoromethane**	**71.5**	**5.00**	**0.157**	**ug/L**
76-13-1	**Trichlorotrifluoroethane**	**58.4**	**5.00**	**0.158**	**ug/L**
75-01-4	**Vinyl chloride**	**55.9**	**5.00**	**0.127**	**ug/L**
1330-20-7	**Xylene (total)**	**145**	**15.0**	**0.179**	**ug/L**
156-59-2	**cis-1,2-Dichloroethene**	**55.7**	**5.00**	**0.103**	**ug/L**
10061-01-5	**cis-1,3-Dichloropropene**	**49.8**	**5.00**	**0.124**	**ug/L**
136777-61-2	**m,p-Xylene**	**97.0**	**10.0**	**0.123**	**ug/L**
104-51-8	**n-Butylbenzene**	**46.3**	**5.00**	**0.123**	**ug/L**
103-65-1	**n-Propylbenzene**	**48.4**	**5.00**	**0.727**	**ug/L**
95-47-6	**o-Xylene**	**47.8**	**5.00**	**0.055**	**ug/L**
135-98-8	**sec-Butylbenzene**	**48.6**	**5.00**	**0.107**	**ug/L**
1634-04-4	**tert-Butyl methyl ether (MTBE)**	**60.6**	**5.00**	**0.078**	**ug/L**
98-06-6	**tert-Butylbenzene**	**48.1**	**5.00**	**0.087**	**ug/L**
156-60-5	**trans-1,2-Dichloroethene**	**57.2**	**5.00**	**0.077**	**ug/L**
10061-02-6	**trans-1,3-Dichloropropene**	**51.0**	**5.00**	**0.128**	**ug/L**
110-57-6	**trans-1,4-Dichloro-2-butene**	**63.0**	**5.00**	**0.264**	**ug/L**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	51.1	ug/L	102	84 - 120
1868-53-7	Dibromofluoromethane	50	50.9	ug/L	102	87 - 116
2037-26-5	Toluene d8	50	48.2	ug/L	96	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	53.8	ug/L	108	76 - 127

SW-846 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/06/2013 13:50	519415	EPA 7470A Dissolved	1	11/11/2013 16:29	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	**Mercury**	**0.0031**	**0.00020**	**0.000070**	**mg/L**

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/06/2013 13:50	519414	EPA 7470A	1	11/11/2013 13:42	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	**Mercury**	**0.0033**	**0.00020**	**0.000070**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061106	**MW-08-06-MS**	Water	11/05/2013 08:00	11/06/2013 10:30

SW-846 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/06/2013 12:30	519409	EPA 3005 Dissolved	10	11/13/2013 19:41	CMB	519915

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	4.82	2.00	0.50	mg/L
7440-36-0	Antimony	0.58J	0.60	0.15	mg/L
7440-38-2	Arsenic	0.47	0.20	0.050	mg/L
7440-39-3	Barium	0.19	0.10	0.025	mg/L
7440-41-7	Beryllium	0.49	0.040	0.010	mg/L
7440-43-9	Cadmium	0.50	0.050	0.013	mg/L
7440-70-2	Calcium	503	8.00	2.00	mg/L
7440-47-3	Chromium	0.52	0.10	0.025	mg/L
7440-48-4	Cobalt	0.49	0.10	0.025	mg/L
7440-50-8	Copper	0.73	0.20	0.050	mg/L
7439-89-6	Iron	5.00	2.00	0.50	mg/L
7439-92-1	Lead	0.40	0.15	0.038	mg/L
7439-95-4	Magnesium	845	2.00	0.50	mg/L
7439-96-5	Manganese	0.52	0.15	0.038	mg/L
7440-02-0	Nickel	0.52	0.40	0.10	mg/L
7440-09-7	Potassium	34.5	5.00	1.25	mg/L
7782-49-2	Selenium	0.51	0.40	0.10	mg/L
7440-22-4	Silver	0.39	0.10	0.025	mg/L
7440-23-5	Sodium	4640	10.0	2.50	mg/L
7440-28-0	Thallium	0.53	0.20	0.050	mg/L
7440-62-2	Vanadium	1.06	0.20	0.050	mg/L
7440-66-6	Zinc	0.47	0.20	0.050	mg/L

EPA 300.0 Inorganic Anions

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			50	11/06/2013 18:25	JEM	519406

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	129	10.0	2.50	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061107	**MW-08-06-MSD**	Water	11/05/2013 08:00	11/06/2013 10:30

SW-846 8260B Water

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/08/2013 16:35	LBH	519587

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	52.4	5.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	55.1	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	54.1	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	54.4	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	53.8	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	55.9	5.00	0.208	ug/L
563-58-6	1,1-Dichloropropene	50.2	5.00	0.052	ug/L
96-18-4	1,2,3-Trichloropropane	54.3	5.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	47.6	5.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	46.9	5.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	53.5	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	53.4	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	50.2	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	53.4	5.00	0.116	ug/L
540-59-0	1,2-Dichloroethene(Total)	109	10.0	0.180	ug/L
78-87-5	1,2-Dichloropropane	53.8	5.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	47.2	5.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	51.5	5.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	52.9	5.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	48.1	5.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	53.0	5.00	0.170	ug/L
78-93-3	2-Butanone	45.4	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	52.1	5.00	0.080	ug/L
591-78-6	2-Hexanone	47.9	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	53.3	5.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	47.9	5.00	0.070	ug/L
108-10-1	4-Methyl-2-pentanone	58.2	5.00	0.120	ug/L
67-64-1	Acetone	30.8	5.00	0.193	ug/L
71-43-2	Benzene	54.1	5.00	0.111	ug/L
108-86-1	Bromobenzene	51.6	5.00	0.145	ug/L
74-97-5	Bromochloromethane	55.5	5.00	0.127	ug/L
75-27-4	Bromodichloromethane	51.4	5.00	0.083	ug/L
75-25-2	Bromoform	50.7	5.00	0.215	ug/L
74-83-9	Bromomethane	41.6	5.00	0.427	ug/L
75-15-0	Carbon disulfide	52.5	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	55.2	5.00	0.248	ug/L
108-90-7	Chlorobenzene	50.2	5.00	0.083	ug/L
75-00-3	Chloroethane	48.8	5.00	0.235	ug/L
67-66-3	Chloroform	52.3	5.00	0.155	ug/L
74-87-3	Chloromethane	50.6	5.00	0.144	ug/L
124-48-1	Dibromochloromethane	52.2	5.00	0.054	ug/L
74-95-3	Dibromomethane	52.6	5.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	54.4	5.00	0.145	ug/L
100-41-4	Ethylbenzene	53.6	5.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	52.9	5.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	47.8	5.00	0.130	ug/L
74-88-4	Methyl iodide	38.6	5.00	0.084	ug/L
75-09-2	Methylene chloride	51.6	5.00	0.149	ug/L
91-20-3	Naphthalene	49.3	5.00	0.176	ug/L
100-42-5	Styrene	46.1	5.00	0.089	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061107	**MW-08-06-MSD**	Water	11/05/2013 08:00	11/06/2013 10:30

SW-846 8260B Water

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/08/2013 16:35	LBH	519587

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	**Tetrachloroethene**	**52.7**	**5.00**	**0.193**	**ug/L**
108-88-3	**Toluene**	**49.6**	**5.00**	**0.122**	**ug/L**
79-01-6	**Trichloroethene**	**53.7**	**5.00**	**0.161**	**ug/L**
75-69-4	**Trichlorofluoromethane**	**65.9**	**5.00**	**0.157**	**ug/L**
76-13-1	**Trichlorotrifluoroethane**	**54.0**	**5.00**	**0.158**	**ug/L**
75-01-4	**Vinyl chloride**	**54.0**	**5.00**	**0.127**	**ug/L**
1330-20-7	**Xylene (total)**	**144**	**15.0**	**0.179**	**ug/L**
156-59-2	**cis-1,2-Dichloroethene**	**53.9**	**5.00**	**0.103**	**ug/L**
10061-01-5	**cis-1,3-Dichloropropene**	**48.0**	**5.00**	**0.124**	**ug/L**
136777-61-2	**m,p-Xylene**	**96.5**	**10.0**	**0.123**	**ug/L**
104-51-8	**n-Butylbenzene**	**46.7**	**5.00**	**0.123**	**ug/L**
103-65-1	**n-Propylbenzene**	**47.5**	**5.00**	**0.727**	**ug/L**
95-47-6	**o-Xylene**	**47.1**	**5.00**	**0.055**	**ug/L**
135-98-8	**sec-Butylbenzene**	**48.2**	**5.00**	**0.107**	**ug/L**
1634-04-4	**tert-Butyl methyl ether (MTBE)**	**59.9**	**5.00**	**0.078**	**ug/L**
98-06-6	**tert-Butylbenzene**	**47.7**	**5.00**	**0.087**	**ug/L**
156-60-5	**trans-1,2-Dichloroethene**	**55.2**	**5.00**	**0.077**	**ug/L**
10061-02-6	**trans-1,3-Dichloropropene**	**48.9**	**5.00**	**0.128**	**ug/L**
110-57-6	**trans-1,4-Dichloro-2-butene**	**70.5**	**5.00**	**0.264**	**ug/L**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	51.1	ug/L	102	84 - 120
1868-53-7	Dibromofluoromethane	50	49.6	ug/L	99	87 - 116
2037-26-5	Toluene d8	50	47.9	ug/L	96	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	50.6	ug/L	101	76 - 127

SW-846 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/06/2013 13:50	519415	EPA 7470A Dissolved	1	11/11/2013 16:31	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	**Mercury**	**0.0032**	**0.00020**	**0.000070**	**mg/L**

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/06/2013 13:50	519414	EPA 7470A	1	11/11/2013 13:44	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	**Mercury**	**0.0034**	**0.00020**	**0.000070**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061107	**MW-08-06-MSD**	Water	11/05/2013 08:00	11/06/2013 10:30

SW-846 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/06/2013 12:30	519409	EPA 3005 Dissolved	10	11/13/2013 19:49	CMB	519915

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	4.76	2.00	0.50	mg/L
7440-36-0	Antimony	0.58J	0.60	0.15	mg/L
7440-38-2	Arsenic	0.58	0.20	0.050	mg/L
7440-39-3	Barium	0.14	0.10	0.025	mg/L
7440-41-7	Beryllium	0.50	0.040	0.010	mg/L
7440-43-9	Cadmium	0.50	0.050	0.013	mg/L
7440-70-2	Calcium	500	8.00	2.00	mg/L
7440-47-3	Chromium	0.52	0.10	0.025	mg/L
7440-48-4	Cobalt	0.49	0.10	0.025	mg/L
7440-50-8	Copper	0.74	0.20	0.050	mg/L
7439-89-6	Iron	5.17	2.00	0.50	mg/L
7439-92-1	Lead	0.41	0.15	0.038	mg/L
7439-95-4	Magnesium	849	2.00	0.50	mg/L
7439-96-5	Manganese	0.52	0.15	0.038	mg/L
7440-02-0	Nickel	0.53	0.40	0.10	mg/L
7440-09-7	Potassium	34.9	5.00	1.25	mg/L
7782-49-2	Selenium	0.52	0.40	0.10	mg/L
7440-22-4	Silver	0.39	0.10	0.025	mg/L
7440-23-5	Sodium	4740	10.0	2.50	mg/L
7440-28-0	Thallium	0.48	0.20	0.050	mg/L
7440-62-2	Vanadium	1.08	0.20	0.050	mg/L
7440-66-6	Zinc	0.48	0.20	0.050	mg/L

EPA 300.0 Inorganic Anions

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			50	11/06/2013 18:43	JEM	519406

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	128	10.0	2.50	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061108	**MW-08-04**	Water	11/05/2013 09:50	11/06/2013 10:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/08/2013 13:16	LBH	519587

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	5.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
563-58-6	1,1-Dichloropropene	0.052U	5.00	0.052	ug/L
96-18-4	1,2,3-Trichloropropane	0.065U	5.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.084U	5.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
540-59-0	1,2-Dichloroethene(Total)	0.180U	10.0	0.180	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.066U	5.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	0.059U	5.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	0.170U	5.00	0.170	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	0.080U	5.00	0.080	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	0.124U	5.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	0.070U	5.00	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	5.00	0.111	ug/L
108-86-1	Bromobenzene	0.145U	5.00	0.145	ug/L
74-97-5	Bromochloromethane	0.127U	5.00	0.127	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
74-95-3	Dibromomethane	0.211U	5.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	0.265U	5.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
74-88-4	Methyl iodide	0.084U	5.00	0.084	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
91-20-3	Naphthalene	0.176U	5.00	0.176	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061108	**MW-08-04**	Water	11/05/2013 09:50	11/06/2013 10:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/08/2013 13:16	LBH	519587

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	0.193U	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	0.161U	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
104-51-8	n-Butylbenzene	0.123U	5.00	0.123	ug/L
103-65-1	n-Propylbenzene	0.727U	5.00	0.727	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
135-98-8	sec-Butylbenzene	0.107U	5.00	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	5.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	0.264U	5.00	0.264	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	49.7	ug/L	99	84 - 120
1868-53-7	Dibromofluoromethane	50	51.6	ug/L	103	87 - 116
2037-26-5	Toluene d8	50	53.5	ug/L	107	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	51.9	ug/L	104	76 - 127

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/06/2013 13:50	519415	EPA 7470A Dissolved	1	11/11/2013 16:32	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000070U	0.00020	0.000070	mg/L

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/06/2013 13:50	519414	EPA 7470A	1	11/11/2013 14:02	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000070U	0.00020	0.000070	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061108	**MW-08-04**	Water	11/05/2013 09:50	11/06/2013 10:30

EPA 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/06/2013 12:30	519409	EPA 3005 Dissolved	1	11/15/2013 14:54	CMB	520112

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	0.050U	0.20	0.050	mg/L
7440-36-0	Antimony	0.015U	0.060	0.015	mg/L
7440-38-2	**Arsenic**	**0.0074J**	**0.020**	**0.0050**	**mg/L**
7440-39-3	**Barium**	**0.011**	**0.010**	**0.0025**	**mg/L**
7440-41-7	Beryllium	0.0010U	0.0040	0.0010	mg/L
7440-43-9	Cadmium	0.0013U	0.0050	0.0013	mg/L
7440-70-2	**Calcium**	**489**	**0.80**	**0.20**	**mg/L**
7440-47-3	**Chromium**	**0.015**	**0.010**	**0.0025**	**mg/L**
7440-48-4	**Cobalt**	**0.0034J**	**0.010**	**0.0025**	**mg/L**
7440-50-8	Copper	0.0050U	0.020	0.0050	mg/L
7439-89-6	Iron	0.050U	0.20	0.050	mg/L
7439-92-1	Lead	0.0038U	0.015	0.0038	mg/L
7439-95-4	**Magnesium**	**280**	**0.20**	**0.050**	**mg/L**
7439-96-5	**Manganese**	**0.0044J**	**0.015**	**0.0038**	**mg/L**
7440-02-0	Nickel	0.010U	0.040	0.010	mg/L
7440-09-7	**Potassium**	**18.4**	**0.50**	**0.13**	**mg/L**
7782-49-2	Selenium	0.010U	0.040	0.010	mg/L
7440-22-4	Silver	0.0025U	0.010	0.0025	mg/L
7440-23-5	**Sodium**	**512**	**1.00**	**0.25**	**mg/L**
7440-28-0	Thallium	0.0050U	0.020	0.0050	mg/L
7440-62-2	**Vanadium**	**0.047**	**0.020**	**0.0050**	**mg/L**
7440-66-6	Zinc	0.0050U	0.020	0.0050	mg/L

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/09/2013 13:51	BNW	519691

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	**Total Dissolved Solids(TDS)**	**3080**	**10.0**	**4.39**	**mg/L**

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			5	11/06/2013 19:01	JEM	519406

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	**Nitrate**	**3.90**	**1.00**	**0.250**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061109	**MW-08-05**	Water	11/05/2013 10:50	11/06/2013 10:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/08/2013 13:36	LBH	519587

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	5.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
563-58-6	1,1-Dichloropropene	0.052U	5.00	0.052	ug/L
96-18-4	1,2,3-Trichloropropane	0.065U	5.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.084U	5.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
540-59-0	1,2-Dichloroethene(Total)	0.180U	10.0	0.180	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.066U	5.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	0.059U	5.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	0.170U	5.00	0.170	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	0.080U	5.00	0.080	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	0.124U	5.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	0.070U	5.00	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	5.00	0.111	ug/L
108-86-1	Bromobenzene	0.145U	5.00	0.145	ug/L
74-97-5	Bromochloromethane	0.127U	5.00	0.127	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
74-95-3	Dibromomethane	0.211U	5.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	0.265U	5.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
74-88-4	Methyl iodide	0.084U	5.00	0.084	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
91-20-3	Naphthalene	0.176U	5.00	0.176	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061109	**MW-08-05**	Water	11/05/2013 10:50	11/06/2013 10:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/08/2013 13:36	LBH	519587

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	0.193U	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	0.161U	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
104-51-8	n-Butylbenzene	0.123U	5.00	0.123	ug/L
103-65-1	n-Propylbenzene	0.727U	5.00	0.727	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
135-98-8	sec-Butylbenzene	0.107U	5.00	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	5.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	0.264U	5.00	0.264	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	50.2	ug/L	100	84 - 120
1868-53-7	Dibromofluoromethane	50	52	ug/L	104	87 - 116
2037-26-5	Toluene d8	50	51.9	ug/L	104	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	52.6	ug/L	105	76 - 127

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/06/2013 13:50	519415	EPA 7470A Dissolved	1	11/11/2013 16:34	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000070U	0.00020	0.000070	mg/L

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/06/2013 13:50	519414	EPA 7470A	1	11/11/2013 14:04	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000070U	0.00020	0.000070	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061109	**MW-08-05**	Water	11/05/2013 10:50	11/06/2013 10:30

EPA 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/06/2013 12:30	519409	EPA 3005 Dissolved	1	11/15/2013 15:01	CMB	520112

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	0.050U	0.20	0.050	mg/L
7440-36-0	Antimony	0.015U	0.060	0.015	mg/L
7440-38-2	Arsenic	0.0050U	0.020	0.0050	mg/L
7440-39-3	**Barium**	**0.019**	**0.010**	**0.0025**	**mg/L**
7440-41-7	Beryllium	0.0010U	0.0040	0.0010	mg/L
7440-43-9	Cadmium	0.0013U	0.0050	0.0013	mg/L
7440-70-2	**Calcium**	**616**	**0.80**	**0.20**	**mg/L**
7440-47-3	Chromium	0.0025U	0.010	0.0025	mg/L
7440-48-4	**Cobalt**	**0.0041J**	**0.010**	**0.0025**	**mg/L**
7440-50-8	Copper	0.0050U	0.020	0.0050	mg/L
7439-89-6	**Iron**	**1.31**	**0.20**	**0.050**	**mg/L**
7439-92-1	**Lead**	**0.0062J**	**0.015**	**0.0038**	**mg/L**
7439-95-4	**Magnesium**	**49.3**	**0.20**	**0.050**	**mg/L**
7439-96-5	**Manganese**	**0.13**	**0.015**	**0.0038**	**mg/L**
7440-02-0	Nickel	0.010U	0.040	0.010	mg/L
7440-09-7	**Potassium**	**7.21**	**0.50**	**0.13**	**mg/L**
7782-49-2	Selenium	0.010U	0.040	0.010	mg/L
7440-22-4	Silver	0.0025U	0.010	0.0025	mg/L
7440-23-5	**Sodium**	**22.2**	**1.00**	**0.25**	**mg/L**
7440-28-0	Thallium	0.0050U	0.020	0.0050	mg/L
7440-62-2	**Vanadium**	**0.013J**	**0.020**	**0.0050**	**mg/L**
7440-66-6	Zinc	0.0050U	0.020	0.0050	mg/L

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/09/2013 13:51	BNW	519691

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	**Total Dissolved Solids(TDS)**	**2510**	**10.0**	**4.39**	**mg/L**

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			2	11/06/2013 19:18	JEM	519406

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	0.100U	0.400	0.100	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061110	**S10-MW01**	Water	11/05/2013 11:55	11/06/2013 10:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/08/2013 13:56	LBH	519587

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	5.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
563-58-6	1,1-Dichloropropene	0.052U	5.00	0.052	ug/L
96-18-4	1,2,3-Trichloropropane	0.065U	5.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.084U	5.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	**1,2-Dichloroethane**	**22.0**	**5.00**	**0.116**	**ug/L**
540-59-0	1,2-Dichloroethene(Total)	0.180U	10.0	0.180	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.066U	5.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	0.059U	5.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	0.170U	5.00	0.170	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	0.080U	5.00	0.080	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	0.124U	5.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	0.070U	5.00	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	5.00	0.111	ug/L
108-86-1	Bromobenzene	0.145U	5.00	0.145	ug/L
74-97-5	Bromochloromethane	0.127U	5.00	0.127	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
74-95-3	Dibromomethane	0.211U	5.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	0.265U	5.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
74-88-4	Methyl iodide	0.084U	5.00	0.084	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
91-20-3	Naphthalene	0.176U	5.00	0.176	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061110	**S10-MW01**	Water	11/05/2013 11:55	11/06/2013 10:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/08/2013 13:56	LBH	519587

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	0.193U	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	0.161U	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
104-51-8	n-Butylbenzene	0.123U	5.00	0.123	ug/L
103-65-1	n-Propylbenzene	0.727U	5.00	0.727	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
135-98-8	sec-Butylbenzene	0.107U	5.00	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	5.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	0.264U	5.00	0.264	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	47.6	ug/L	95	84 - 120
1868-53-7	Dibromofluoromethane	50	50.2	ug/L	100	87 - 116
2037-26-5	Toluene d8	50	50.4	ug/L	101	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	49.8	ug/L	100	76 - 127

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/06/2013 13:50	519415	EPA 7470A Dissolved	1	11/11/2013 16:36	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000070U	0.00020	0.000070	mg/L

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/06/2013 13:50	519414	EPA 7470A	1	11/11/2013 14:05	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000070U	0.00020	0.000070	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061110	**S10-MW01**	Water	11/05/2013 11:55	11/06/2013 10:30

EPA 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/06/2013 12:30	519409	EPA 3005 Dissolved	10	11/13/2013 21:07	CMB	519915

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	0.50U	2.00	0.50	mg/L
7440-36-0	Antimony	0.15U	0.60	0.15	mg/L
7440-38-2	Arsenic	0.050U	0.20	0.050	mg/L
7440-39-3	Barium	0.025U	0.10	0.025	mg/L
7440-41-7	Beryllium	0.010U	0.040	0.010	mg/L
7440-43-9	Cadmium	0.013U	0.050	0.013	mg/L
7440-70-2	**Calcium**	**488**	**8.00**	**2.00**	**mg/L**
7440-47-3	Chromium	0.025U	0.10	0.025	mg/L
7440-48-4	Cobalt	0.025U	0.10	0.025	mg/L
7440-50-8	**Copper**	**0.21**	**0.20**	**0.050**	**mg/L**
7439-89-6	Iron	0.50U	2.00	0.50	mg/L
7439-92-1	Lead	0.038U	0.15	0.038	mg/L
7439-95-4	**Magnesium**	**528**	**2.00**	**0.50**	**mg/L**
7439-96-5	**Manganese**	**0.28**	**0.15**	**0.038**	**mg/L**
7440-02-0	Nickel	0.10U	0.40	0.10	mg/L
7440-09-7	**Potassium**	**16.4**	**5.00**	**1.25**	**mg/L**
7782-49-2	Selenium	0.10U	0.40	0.10	mg/L
7440-22-4	Silver	0.025U	0.10	0.025	mg/L
7440-23-5	**Sodium**	**2580**	**10.0**	**2.50**	**mg/L**
7440-28-0	Thallium	0.050U	0.20	0.050	mg/L
7440-62-2	**Vanadium**	**0.53**	**0.20**	**0.050**	**mg/L**
7440-66-6	Zinc	0.050U	0.20	0.050	mg/L

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/09/2013 13:51	BNW	519691

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	**Total Dissolved Solids(TDS)**	**11000**	**10.0**	**4.39**	**mg/L**

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			20	11/06/2013 19:36	JEM	519406

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	**Nitrate**	**5.62**	**4.00**	**1.00**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061111	**TRIP BLANK**	Water	11/04/2013 00:00	11/06/2013 10:30

SW-846 8260B Water

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/08/2013 14:16	LBH	519587

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	5.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
563-58-6	1,1-Dichloropropene	0.052U	5.00	0.052	ug/L
96-18-4	1,2,3-Trichloropropane	0.065U	5.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.084U	5.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
540-59-0	1,2-Dichloroethene(Total)	0.180U	10.0	0.180	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.066U	5.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	0.059U	5.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	0.170U	5.00	0.170	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	0.080U	5.00	0.080	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	0.124U	5.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	0.070U	5.00	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	5.00	0.111	ug/L
108-86-1	Bromobenzene	0.145U	5.00	0.145	ug/L
74-97-5	Bromochloromethane	0.127U	5.00	0.127	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
74-95-3	Dibromomethane	0.211U	5.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	0.265U	5.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
74-88-4	Methyl iodide	0.084U	5.00	0.084	ug/L
75-09-2	**Methylene chloride**	**1.51J**	**5.00**	**0.149**	**ug/L**
91-20-3	Naphthalene	0.176U	5.00	0.176	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311061111	**TRIP BLANK**	Water	11/04/2013 00:00	11/06/2013 10:30

SW-846 8260B Water

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/08/2013 14:16	LBH	519587

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	0.193U	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	0.161U	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
104-51-8	n-Butylbenzene	0.123U	5.00	0.123	ug/L
103-65-1	n-Propylbenzene	0.727U	5.00	0.727	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
135-98-8	sec-Butylbenzene	0.107U	5.00	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	5.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	0.264U	5.00	0.264	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	48.2	ug/L	96	84 - 120
1868-53-7	Dibromofluoromethane	50	51.9	ug/L	104	87 - 116
2037-26-5	Toluene d8	50	51.5	ug/L	103	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	51.6	ug/L	103	76 - 127

GC/MS Volatiles Quality Control Summary

Analytical Batch	519587	**Client ID**	MB519587			LCS519587			LCSD519587		
Prep Batch	N/A	**GCAL ID**	1254546			1254547			1254548		
		Sample Type	Method Blank			LCS			LCSD		
		Analytical Date	11/08/2013 10:16			11/08/2013 08:56			11/08/2013 09:16		
		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	55.5	111	59 - 134	54.9	110	1	30
74-97-5	Bromochloromethane	0.127U	0.127		50.0	58.1	**116***	78 - 112	54.7	109	6	30
75-27-4	Bromodichloromethane	0.083U	0.083		50.0	52.6	105	76 - 116	53.4	107	2	30
75-25-2	Bromoform	0.215U	0.215		50.0	50.3	101	68 - 128	48.2	96	4	30
74-83-9	Bromomethane	0.427U	0.427		50.0	45.3	91	55 - 151	47.9	96	6	30
75-15-0	Carbon disulfide	0.190U	0.190		50.0	56.0	112	67 - 147	56.6	113	1	30
56-23-5	Carbon tetrachloride	0.248U	0.248		50.0	58.1	116	74 - 139	58.4	117	1	30
75-00-3	Chloroethane	0.235U	0.235		50.0	50.4	101	54 - 166	51.8	104	3	30
136777-61-2	m,p-Xylene	0.123U	0.123		100	101	101	83 - 121	100	100	1	30
67-66-3	Chloroform	0.155U	0.155		50.0	54.5	109	85 - 123	53.2	106	2	30
74-87-3	Chloromethane	0.144U	0.144		50.0	51.3	103	55 - 173	53.8	108	5	30
124-48-1	Dibromochloromethane	0.054U	0.054		50.0	52.6	105	74 - 116	51.4	103	2	30
74-95-3	Dibromomethane	0.211U	0.211		50.0	54.1	108	81 - 116	52.7	105	3	30
75-71-8	Dichlorodifluoromethane	0.145U	0.145		50.0	57.2	114	34 - 158	56.5	113	1	30
75-34-3	1,1-Dichloroethane	0.171U	0.171		50.0	56.9	114	82 - 127	57.2	114	1	30
107-06-2	1,2-Dichloroethane	0.116U	0.116		50.0	54.0	108	76 - 122	53.7	107	1	30
156-59-2	cis-1,2-Dichloroethene	0.103U	0.103		50.0	56.0	112	81 - 114	57.2	114	2	30
156-60-5	trans-1,2-Dichloroethene	0.077U	0.077		50.0	56.8	114	82 - 126	58.0	116	2	30
75-09-2	Methylene chloride	0.149U	0.149		50.0	53.0	106	69 - 125	52.6	105	1	30
78-87-5	1,2-Dichloropropane	0.150U	0.150		50.0	58.5	117	81 - 120	56.6	113	3	30
10061-01-5	cis-1,3-Dichloropropene	0.124U	0.124		50.0	49.9	100	83 - 119	50.2	100	1	30
10061-02-6	trans-1,3-Dichloropropene	0.128U	0.128		50.0	50.3	101	87 - 123	49.9	100	1	30
100-41-4	Ethylbenzene	0.109U	0.109		50.0	57.6	115	87 - 118	56.8	114	1	30
591-78-6	2-Hexanone	0.122U	0.122		50.0	50.2	100	58 - 125	48.9	98	3	30
98-82-8	Isopropylbenzene (Cumene)	0.130U	0.130		50.0	50.1	100	87 - 131	50.7	101	1	30
78-93-3	2-Butanone	0.142U	0.142		50.0	57.7	115	61 - 127	56.8	114	2	30
74-88-4	Methyl iodide	0.084U	0.084		50.0	48.0	96	72 - 125	47.7	95	1	30
108-10-1	4-Methyl-2-pentanone	0.120U	0.120		50.0	50.3	101	62 - 125	48.9	98	3	30
103-65-1	n-Propylbenzene	0.727U	0.727		50.0	49.4	99	86 - 125	49.3	99	0	30
100-42-5	Styrene	0.089U	0.089		50.0	49.0	98	78 - 118	49.2	98	0	30
127-18-4	Tetrachloroethene	0.193U	0.193		50.0	56.0	112	80 - 131	56.8	114	1	30
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	0.120		50.0	55.1	110	81 - 119	53.3	107	3	30
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	0.109		50.0	50.5	101	71 - 120	47.2	94	7	30

GC/MS Volatiles Quality Control Summary

Analytical Batch	519587	**Client ID**	MB519587			LCS519587			LCSD519587		
Prep Batch	N/A	**GCAL ID**	1254546			1254547			1254548		
		Sample Type	Method Blank			LCS			LCSD		
		Analytical Date	11/08/2013 10:16			11/08/2013 08:56			11/08/2013 09:16		
		Matrix	Water			Water			Water		
EPA 8260B		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
120-82-1	1,2,4-Trichlorobenzene	0.105U	0.105	50.0	51.0	102	68 - 123	51.4	103	1	30
71-55-6	1,1,1-Trichloroethane	0.123U	0.123	50.0	56.9	114	79 - 133	57.3	115	1	30
79-00-5	1,1,2-Trichloroethane	0.159U	0.159	50.0	55.6	111	80 - 114	55.7	111	0	30
75-69-4	Trichlorofluoromethane	0.157U	0.157	50.0	71.0	142	66 - 156	71.8	144	1	30
96-18-4	1,2,3-Trichloropropane	0.065U	0.065	50.0	49.8	100	77 - 115	48.7	97	2	30
95-63-6	1,2,4-Trimethylbenzene	0.084U	0.084	50.0	49.8	100	82 - 120	49.5	99	1	30
108-67-8	1,3,5-Trimethylbenzene	0.066U	0.066	50.0	50.4	101	83 - 123	49.8	100	1	30
75-01-4	Vinyl chloride	0.127U	0.127	50.0	57.7	115	57 - 153	59.4	119	3	30
95-47-6	o-Xylene	0.055U	0.055	50.0	50.3	101	83 - 121	50.2	100	0	30
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	0.194	50.0	50.8	102	61 - 118	48.2	96	5	30
106-93-4	1,2-Dibromoethane	0.102U	0.102	50.0	53.6	107	80 - 115	51.8	104	3	30
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	0.078	50.0	58.9	**118***	75 - 116	58.0	116	2	30
540-59-0	1,2-Dichloroethene(Total)	0.180U	0.180	100	113	113	74 - 128	115	115	2	30
99-87-6	4-Isopropyltoluene	0.070U	0.070	50.0	50.0	100	83 - 125	49.9	100	0	30
1330-20-7	Xylene (total)	0.179U	0.179	150	151	101	74 - 127	150	100	1	30
110-57-6	trans-1,4-Dichloro-2-butene	0.264U	0.264	50.0	58.5	117	51 - 137	53.5	107	9	30
594-20-7	2,2-Dichloropropane	0.170U	0.170	50.0	54.1	108	77 - 138	55.4	111	2	30
76-13-1	Trichlorotrifluoroethane	0.158U	0.158	50.0	57.1	114	74 - 139	57.9	116	1	30
563-58-6	1,1-Dichloropropene	0.052U	0.052	50.0	53.8	108	87 - 127	54.1	108	1	30
142-28-9	1,3-Dichloropropane	0.059U	0.059	50.0	53.8	108	81 - 113	52.1	104	3	30
108-86-1	Bromobenzene	0.145U	0.145	50.0	52.9	106	83 - 115	53.6	107	1	30
95-49-8	2-Chlorotoluene	0.080U	0.080	50.0	55.0	110	81 - 121	54.1	108	2	30
106-43-4	4-Chlorotoluene	0.124U	0.124	50.0	56.0	112	84 - 120	54.5	109	3	30
98-06-6	tert-Butylbenzene	0.087U	0.087	50.0	49.5	99	83 - 126	50.1	100	1	30
135-98-8	sec-Butylbenzene	0.107U	0.107	50.0	51.0	102	86 - 127	50.8	102	0	30
541-73-1	1,3-Dichlorobenzene	0.138U	0.138	50.0	53.8	108	86 - 115	52.3	105	3	30
106-46-7	1,4-Dichlorobenzene	0.083U	0.083	50.0	50.3	101	87 - 113	50.5	101	0	30
104-51-8	n-Butylbenzene	0.123U	0.123	50.0	49.8	100	84 - 124	50.1	100	1	30
95-50-1	1,2-Dichlorobenzene	0.135U	0.135	50.0	52.8	106	85 - 115	51.9	104	2	30
87-68-3	Hexachlorobutadiene	0.265U	0.265	50.0	56.8	114	71 - 133	55.8	112	2	30
91-20-3	Naphthalene	0.176U	0.176	50.0	48.6	97	59 - 125	47.1	94	3	35
75-35-4	1,1-Dichloroethene	0.208U	0.208	50.0	57.3	115	75 - 133	60.5	121	5	20
71-43-2	Benzene	0.111U	0.111	50.0	56.9	114	83 - 124	57.7	115	1	20

GC/MS Volatiles Quality Control Summary

Analytical Batch	519587	**Client ID**	MB519587			LCS519587			LCSD519587		
Prep Batch	N/A	**GCAL ID**	1254546			1254547			1254548		
		Sample Type	Method Blank			LCS			LCSD		
		Analytical Date	11/08/2013 10:16			11/08/2013 08:56			11/08/2013 09:16		
		Matrix	Water			Water			Water		
EPA 8260B		**Units**	**Result**	ug/L **RDL**	**Spike Added**	**Result**	**% R**	**Control Limits % R**	**Result**	**% R**	**RPD**	**RPD Limit**
79-01-6	Trichloroethene		0.161U	0.161	50.0	56.8	114	85 - 124	56.1	112	1	20
108-88-3	Toluene		0.122U	0.122	50.0	52.9	106	86 - 116	53.1	106	0	20
108-90-7	Chlorobenzene		0.083U	0.083	50.0	52.7	105	87 - 115	52.2	104	1	20
Surrogate												
460-00-4	4-Bromofluorobenzene		49.5	99	50	50.7	101	84 - 120	50.7	101		
1868-53-7	Dibromofluoromethane		49.9	100	50	50.6	101	87 - 116	49.6	99		
2037-26-5	Toluene d8		52	104	50	49.6	99	86 - 112	49.3	99		
17060-07-0	1,2-Dichloroethane-d4		49.1	98	50	49.5	99	76 - 127	49	98		

Analytical Batch	519587	**Client ID**	MW-08-06			MW-08-06-MS			MW-08-06-MSD		
Prep Batch	N/A	**GCAL ID**	21311061105			21311061106			21311061107		
		Sample Type	SAMPLE			MS			MSD		
		Analytical Date	11/08/2013 10:37			11/08/2013 16:15			11/08/2013 16:35		
		Matrix	Water			Water			Water		
SW-846 8260B Water		**Units**	**Result**	ug/L **RDL**	**Spike Added**	**Result**	**% R**	**Control Limits % R**	**Result**	**% R**	**RPD**	**RPD Limit**
630-20-6	1,1,1,2-Tetrachloroethane		0.00	0.120	50.0	53.5	107	81 - 119	52.4	105	2	10
71-55-6	1,1,1-Trichloroethane		0.00	0.123	50.0	57.9	116	79 - 133	55.1	110	5	11
79-34-5	1,1,2,2-Tetrachloroethane		0.00	0.109	50.0	51.0	102	71 - 120	54.1	108	6	11
79-00-5	1,1,2-Trichloroethane		0.00	0.159	50.0	53.5	107	80 - 114	54.4	109	2	11
75-34-3	1,1-Dichloroethane		0.00	0.171	50.0	57.0	114	82 - 127	53.8	108	6	10
75-35-4	1,1-Dichloroethene		0.00	0.208	50.0	59.4	119	75 - 133	55.9	112	6	13
563-58-6	1,1-Dichloropropene		0.00	0.052	50.0	53.4	107	87 - 127	50.2	100	6	10
96-18-4	1,2,3-Trichloropropane		0.00	0.065	50.0	51.2	102	77 - 115	54.3	109	6	12
120-82-1	1,2,4-Trichlorobenzene		0.00	0.105	50.0	43.3	87	68 - 123	47.6	95	9	11
95-63-6	1,2,4-Trimethylbenzene		0.00	0.084	50.0	48.0	96	82 - 120	46.9	94	2	10
96-12-8	1,2-Dibromo-3-chloropropane		0.00	0.194	50.0	49.7	99	61 - 118	53.5	107	7	15
106-93-4	1,2-Dibromoethane		0.00	0.102	50.0	51.2	102	80 - 115	53.4	107	4	10
95-50-1	1,2-Dichlorobenzene		0.00	0.135	50.0	50.1	100	85 - 115	50.2	100	0	9
107-06-2	1,2-Dichloroethane		0.00	0.116	50.0	55.5	111	76 - 122	53.4	107	4	11
540-59-0	1,2-Dichloroethene(Total)		0.00	0.180	100	113	113	74 - 128	109	109	4	30
78-87-5	1,2-Dichloropropane		0.00	0.150	50.0	56.2	112	81 - 120	53.8	108	4	11

GC/MS Volatiles Quality Control Summary

Analytical Batch	519587	**Client ID**	MW-08-06			MW-08-06-MS			MW-08-06-MSD			
Prep Batch	N/A	**GCAL ID**	21311061105			21311061106			21311061107			
		Sample Type	SAMPLE			MS			MSD			
		Analytical Date	11/08/2013 10:37			11/08/2013 16:15			11/08/2013 16:35			
		Matrix	Water			Water			Water			
SW-846 8260B Water		**Units**	ug/L		**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**		**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
108-67-8	1,3,5-Trimethylbenzene	0.00	0.066		50.0	47.6	95	83 - 123	47.2	94	1	10
541-73-1	1,3-Dichlorobenzene	0.00	0.138		50.0	52.0	104	86 - 115	51.5	103	1	9
142-28-9	1,3-Dichloropropane	0.00	0.059		50.0	51.5	103	81 - 113	52.9	106	3	11
106-46-7	1,4-Dichlorobenzene	0.00	0.083		50.0	48.7	97	87 - 113	48.1	96	1	10
594-20-7	2,2-Dichloropropane	0.00	0.170		50.0	56.4	113	77 - 138	53.0	106	6	12
78-93-3	2-Butanone	0.00	0.142		50.0	43.3	87	61 - 127	45.4	91	5	13
95-49-8	2-Chlorotoluene	0.00	0.080		50.0	52.7	105	81 - 121	52.1	104	1	10
591-78-6	2-Hexanone	0.00	0.122		50.0	42.3	85	58 - 125	47.9	96	12	14
106-43-4	4-Chlorotoluene	0.00	0.124		50.0	53.8	108	84 - 120	53.3	107	1	10
99-87-6	4-Isopropyltoluene	0.00	0.070		50.0	47.8	96	83 - 125	47.9	96	0	9
108-10-1	4-Methyl-2-pentanone	0.00	0.120		50.0	54.9	110	62 - 125	58.2	116	6	13
67-64-1	Acetone	0.00	0.193		50.0	29.2	**58***	59 - 134	30.8	62	5	14
71-43-2	Benzene	0.00	0.111		50.0	58.5	117	83 - 124	54.1	108	8	11
108-86-1	Bromobenzene	0.00	0.145		50.0	52.5	105	83 - 115	51.6	103	2	10
74-97-5	Bromochloromethane	0.00	0.127		50.0	60.6	**121***	78 - 112	55.5	111	9	10
75-27-4	Bromodichloromethane	0.00	0.083		50.0	54.0	108	76 - 116	51.4	103	5	10
75-25-2	Bromoform	0.00	0.215		50.0	49.2	98	68 - 128	50.7	101	3	11
74-83-9	Bromomethane	0.00	0.427		50.0	38.4	77	55 - 151	41.6	83	8	21
75-15-0	Carbon disulfide	0.00	0.190		50.0	55.7	111	67 - 147	52.5	105	6	12
56-23-5	Carbon tetrachloride	0.00	0.248		50.0	58.3	117	74 - 139	55.2	110	5	13
108-90-7	Chlorobenzene	0.00	0.083		50.0	51.0	102	87 - 115	50.2	100	2	9
75-00-3	Chloroethane	0.00	0.235		50.0	53.2	106	54 - 166	48.8	98	9	20
67-66-3	Chloroform	0.00	0.155		50.0	56.2	112	85 - 123	52.3	105	7	10
74-87-3	Chloromethane	0.00	0.144		50.0	50.5	101	55 - 173	50.6	101	0	22
124-48-1	Dibromochloromethane	0.00	0.054		50.0	50.9	102	74 - 116	52.2	104	3	11
74-95-3	Dibromomethane	0.00	0.211		50.0	53.8	108	81 - 116	52.6	105	2	10
75-71-8	Dichlorodifluoromethane	0.00	0.145		50.0	56.9	114	34 - 158	54.4	109	4	22
100-41-4	Ethylbenzene	0.00	0.109		50.0	55.4	111	87 - 118	53.6	107	3	10
87-68-3	Hexachlorobutadiene	0.00	0.265		50.0	51.2	102	71 - 133	52.9	106	3	12
98-82-8	Isopropylbenzene (Cumene)	0.00	0.130		50.0	48.1	96	87 - 131	47.8	96	1	10
74-88-4	Methyl iodide	0.00	0.084		50.0	37.4	75	72 - 125	38.6	77	3	11
75-09-2	Methylene chloride	0.00	0.149		50.0	53.9	108	69 - 125	51.6	103	4	11
91-20-3	Naphthalene	0.00	0.176		50.0	41.8	84	59 - 125	49.3	99	**16***	15

GC/MS Volatiles Quality Control Summary

Analytical Batch 519587		**Client ID**	MW-08-06			MW-08-06-MS			MW-08-06-MSD		
Prep Batch N/A		**GCAL ID**	21311061105			21311061106			21311061107		
		Sample Type	SAMPLE			MS			MSD		
		Analytical Date	11/08/2013 10:37			11/08/2013 16:15			11/08/2013 16:35		
		Matrix	Water			Water			Water		
SW-846 8260B Water		**Units**	**Result**	ug/L **RDL**	**Spike Added**	**Result**	**% R**	**Control Limits % R**	**Result**	**% R**	**RPD**	**RPD Limit**
100-42-5	Styrene		0.00	0.089	50.0	47.6	95	78 - 118	46.1	92	3	11
127-18-4	Tetrachloroethene		0.00	0.193	50.0	54.8	110	80 - 131	52.7	105	4	12
108-88-3	Toluene		0.00	0.122	50.0	51.4	103	86 - 116	49.6	99	4	10
79-01-6	Trichloroethene		0.00	0.161	50.0	56.5	113	85 - 124	53.7	107	5	10
75-69-4	Trichlorofluoromethane		0.00	0.157	50.0	71.5	143	66 - 156	65.9	132	8	15
76-13-1	Trichlorotrifluoroethane		0.00	0.158	50.0	58.4	117	74 - 139	54.0	108	8	13
75-01-4	Vinyl chloride		0.00	0.127	50.0	55.9	112	57 - 153	54.0	108	3	22
1330-20-7	Xylene (total)		0.00	0.179	150	145	97	74 - 127	144	96	1	30
156-59-2	cis-1,2-Dichloroethene		0.00	0.103	50.0	55.7	111	81 - 114	53.9	108	3	10
10061-01-5	cis-1,3-Dichloropropene		0.00	0.124	50.0	49.8	100	83 - 119	48.0	96	4	10
136777-61-2	m,p-Xylene		0.00	0.123	100	97.0	97	83 - 121	96.5	97	1	10
104-51-8	n-Butylbenzene		0.00	0.123	50.0	46.3	93	84 - 124	46.7	93	1	10
103-65-1	n-Propylbenzene		0.00	0.727	50.0	48.4	97	86 - 125	47.5	95	2	10
95-47-6	o-Xylene		0.00	0.055	50.0	47.8	96	83 - 121	47.1	94	1	10
135-98-8	sec-Butylbenzene		0.00	0.107	50.0	48.6	97	86 - 127	48.2	96	1	10
1634-04-4	tert-Butyl methyl ether (MTBE)		0.00	0.078	50.0	60.6	**121***	75 - 116	59.9	**120***	1	10
98-06-6	tert-Butylbenzene		0.00	0.087	50.0	48.1	96	83 - 126	47.7	95	1	10
156-60-5	trans-1,2-Dichloroethene		0.00	0.077	50.0	57.2	114	82 - 126	55.2	110	4	10
10061-02-6	trans-1,3-Dichloropropene		0.00	0.128	50.0	51.0	102	87 - 123	48.9	98	4	10
110-57-6	trans-1,4-Dichloro-2-butene		0.00	0.264	50.0	63.0	126	51 - 137	70.5	**141***	11	24
Surrogate												
460-00-4	4-Bromofluorobenzene		48.7	97	50	51.1	102	84 - 120	51.1	102		
1868-53-7	Dibromofluoromethane		49.9	100	50	50.9	102	87 - 116	49.6	99		
2037-26-5	Toluene d8		51.9	104	50	48.2	96	86 - 112	47.9	96		
17060-07-0	1,2-Dichloroethane-d4		51.9	104	50	53.8	108	76 - 127	50.6	101		

GC/MS Volatiles Quality Control Summary

Analytical Batch	519587	**Client ID**	CM02-200S		MATRIX SPIKEMS			MATRIX SPIKE DUPLICATE			
Prep Batch	N/A	**GCAL ID**	21311071704		21311071706			21311071707			
		Sample Type	SAMPLE		MS			MSD			
		Analytical Date	11/08/2013 14:55		11/08/2013 16:55			11/08/2013 17:14			
		Matrix	Water		Water			Water			
EPA 8260B		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
74-83-9	Bromomethane	0.00	0.427	50.0	42.4	85	55 - 151	47.6	95	12	21
56-23-5	Carbon tetrachloride	0.00	0.248	50.0	56.4	113	74 - 139	58.6	117	4	13
75-00-3	Chloroethane	0.00	0.235	50.0	51.1	102	54 - 166	50.7	101	1	20
67-66-3	Chloroform	0.00	0.155	50.0	52.5	105	85 - 123	55.9	112	6	10
74-87-3	Chloromethane	0.00	0.144	50.0	52.0	104	55 - 173	52.8	106	2	22
75-34-3	1,1-Dichloroethane	0.00	0.171	50.0	57.2	114	82 - 127	57.8	116	1	10
107-06-2	1,2-Dichloroethane	0.00	0.116	50.0	53.5	107	76 - 122	56.1	112	5	11
156-59-2	cis-1,2-Dichloroethene	0.00	0.103	50.0	56.0	112	81 - 114	58.6	**117***	5	10
156-60-5	trans-1,2-Dichloroethene	0.00	0.077	50.0	57.5	115	82 - 126	59.1	118	3	10
75-09-2	Methylene chloride	0.00	0.149	50.0	53.7	107	69 - 125	56.1	112	4	11
108-10-1	4-Methyl-2-pentanone	0.00	0.120	50.0	48.5	97	62 - 125	51.1	102	5	13
127-18-4	Tetrachloroethene	0.00	0.193	50.0	56.2	112	80 - 131	56.6	113	1	12
630-20-6	1,1,1,2-Tetrachloroethane	0.00	0.120	50.0	52.8	106	81 - 119	55.3	111	5	10
79-34-5	1,1,2,2-Tetrachloroethane	0.00	0.109	50.0	48.3	97	71 - 120	53.0	106	9	11
71-55-6	1,1,1-Trichloroethane	0.00	0.123	50.0	56.9	114	79 - 133	58.7	117	3	11
79-00-5	1,1,2-Trichloroethane	0.00	0.159	50.0	54.0	108	80 - 114	56.4	113	4	11
75-01-4	Vinyl chloride	0.00	0.127	50.0	56.9	114	57 - 153	57.1	114	0	22
540-59-0	1,2-Dichloroethene(Total)	0.00	0.180	100	114	114	74 - 128	118	118	3	30
75-35-4	1,1-Dichloroethene	0.00	0.208	50.0	59.0	118	75 - 133	61.3	123	4	13
71-43-2	Benzene	0.00	0.111	50.0	57.2	114	83 - 124	57.8	116	1	11
79-01-6	Trichloroethene	0.00	0.161	50.0	56.6	113	85 - 124	57.4	115	1	10
108-88-3	Toluene	0.00	0.122	50.0	51.5	103	86 - 116	53.5	107	4	10
108-90-7	Chlorobenzene	0.00	0.083	50.0	50.3	101	87 - 115	53.2	106	6	9
Surrogate											
460-00-4	4-Bromofluorobenzene			50	51.9	104	84 - 120	51.2	102		
1868-53-7	Dibromofluoromethane			50	50.6	101	87 - 116	49.3	99		
2037-26-5	Toluene d8			50	49	98	86 - 112	48.9	98		
17060-07-0	1,2-Dichloroethane-d4			50	50.4	101	76 - 127	50.5	101		

Inorganics Quality Control Summary

Analytical Batch	519696	**Client ID**	MB519415		LCS519415		
Prep Batch	519415	**GCAL ID**	1253336		1253337		
Prep Method	EPA 7470A	**Sample Type**	Method Blank		LCS		
		Prep Date	11/06/2013 13:50		11/06/2013 13:50		
		Analytical Date	11/11/2013 16:13		11/11/2013 16:15		
		Matrix	Water		Water		
EPA 7470A Dissolved		**Units**	mg/L	**Spike**	**Result**		**Control**
		Result	**RDL**	**Added**		**% R**	**Limits % R**
7439-97-6	Mercury	0.000070U	0.000070	0.0050	0.0050	100	88 - 111

Analytical Batch	519696	**Client ID**	MW-08-06		MW-08-06-MS			MW-08-06-MSD			
Prep Batch	519415	**GCAL ID**	21311061105		21311061106			21311061107			
Prep Method	EPA 7470A	**Sample Type**	SAMPLE		MS			MSD			
	Dissolved	**Prep Date**	11/06/2013 13:50		11/06/2013 13:50			11/06/2013 13:50			
		Analytical Date	11/11/2013 16:27		11/11/2013 16:29			11/11/2013 16:31			
		Matrix	Water		Water			Water			
SW-846 7470A Dissolved		**Units**	mg/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
7439-97-6	Mercury	0.0	0.000070	0.0050	0.0031	**62***	88 - 111	0.0032	**64***	2	10

Inorganics Quality Control Summary

Analytical Batch	519696	**Client ID**	MB519414		LCS519414		
Prep Batch	519414	**GCAL ID**	1253334		1253335		
Prep Method	EPA 7470A	**Sample Type**	Method Blank		LCS		
		Prep Date	11/06/2013 13:50		11/06/2013 13:50		
		Analytical Date	11/11/2013 13:37		11/11/2013 13:38		
		Matrix	Water		Water		
EPA 7470A		**Units**	mg/L	**Spike**	**Result**		**Control**
		Result	**RDL**	**Added**		**% R**	**Limits % R**
7439-97-6	Mercury	0.000070U	0.000070	0.0050	0.0052	103	88 - 111

Analytical Batch	519696	**Client ID**	MW-08-06		MW-08-06-MS			MW-08-06-MSD				
Prep Batch	519414	**GCAL ID**	21311061105		21311061106			21311061107				
Prep Method	EPA 7470A	**Sample Type**	SAMPLE		MS			MSD				
		Prep Date	11/06/2013 13:50		11/06/2013 13:50			11/06/2013 13:50				
		Analytical Date	11/11/2013 13:40		11/11/2013 13:42			11/11/2013 13:44				
		Matrix	Water		Water			Water				
EPA 7470A		**Units**	mg/L	**Spike**	**Result**		**Control**	**Result**				
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**RPD Limit**	
7439-97-6	Mercury	0.0	0.000070	0.0050	0.0033	**65***	80 - 120	0.0034	**68***	5	10	

Inorganics Quality Control Summary

Analytical Batch	519915	**Client ID**	MB519409	LCS519409
Prep Batch	519409	**GCAL ID**	1253315	1253316
Prep Method	EPA 3005	**Sample Type**	Method Blank	LCS
	Dissolved	**Prep Date**	11/06/2013 12:30	11/06/2013 12:30
		Analytical Date	11/13/2013 19:20	11/13/2013 19:27
		Matrix	Water	Water

EPA 6010C Dissolved		**Units**	mg/L	**Spike**	**Result**		**Control**
		Result	**RDL**	**Added**		**% R**	**Limits % R**
7429-90-5	Aluminum	0.050U	0.050	5.00	4.87	97	80 - 120
7440-36-0	Antimony	0.015U	0.015	0.50	0.45	90	80 - 120
7440-38-2	Arsenic	0.0050U	0.0050	0.50	0.48	95	80 - 120
7440-39-3	Barium	0.0025U	0.0025	0.50	0.47	94	80 - 120
7440-41-7	Beryllium	0.0010U	0.0010	0.50	0.46	93	80 - 120
7440-43-9	Cadmium	0.0013U	0.0013	0.50	0.47	95	80 - 120
7440-70-2	Calcium	0.20U	0.20	5.00	4.65	93	80 - 120
7440-47-3	Chromium	0.0025U	0.0025	0.50	0.47	94	80 - 120
7440-48-4	Cobalt	0.0025U	0.0025	0.50	0.46	93	80 - 120
7440-50-8	Copper	0.0050U	0.0050	0.50	0.45	90	80 - 120
7439-89-6	Iron	0.050U	0.050	5.00	4.74	95	80 - 120
7439-92-1	Lead	0.0038U	0.0038	0.50	0.48	96	80 - 120
7439-95-4	Magnesium	0.050U	0.050	5.00	4.80	96	80 - 120
7439-96-5	Manganese	0.0038U	0.0038	0.50	0.47	94	80 - 120
7440-02-0	Nickel	0.010U	0.010	0.50	0.49	98	80 - 120
7440-09-7	Potassium	0.13U	0.13	10.0	9.72	97	80 - 120
7782-49-2	Selenium	0.010U	0.010	0.50	0.48	95	80 - 120
7440-22-4	Silver	0.0025U	0.0025	0.50	0.48	95	80 - 120
7440-23-5	Sodium	1.09	0.25	20.0	20.9	104	80 - 120
7440-28-0	Thallium	0.0050U	0.0050	0.50	0.48	95	80 - 120
7440-62-2	Vanadium	0.0050U	0.0050	0.50	0.47	93	80 - 120
7440-66-6	Zinc	0.0050U	0.0050	0.50	0.48	96	80 - 120

Inorganics Quality Control Summary

Analytical Batch	519915	**Client ID**	MW-08-06	MW-08-06-MS	MW-08-06-MSD
Prep Batch	519409	**GCAL ID**	21311061105	21311061106	21311061107
Prep Method	EPA 3005	**Sample Type**	SAMPLE	MS	MSD
	Dissolved	**Prep Date**	11/06/2013 12:30	11/06/2013 12:30	11/06/2013 12:30
		Analytical Date	11/13/2013 19:34	11/13/2013 19:41	11/13/2013 19:49
		Matrix	Water	Water	Water

SW-846 6010C Dissolved		**Units**	mg/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
7429-90-5	Aluminum	0.0	0.50	5.00	4.82	96	80 - 120	4.76	95	1	20
7440-36-0	Antimony	0.095	0.15	0.50	0.58	98	80 - 120	0.58	97	1	20
7440-38-2	Arsenic	0.072	0.050	0.50	0.47	80	80 - 120	0.58	101	**21***	20
7440-39-3	Barium	0.0094	0.025	0.50	0.19	**35***	80 - 120	0.14	**26***	**28***	20
7440-41-7	Beryllium	0.0	0.010	0.50	0.49	98	80 - 120	0.50	100	2	20
7440-43-9	Cadmium	0.0	0.013	0.50	0.50	99	80 - 120	0.50	99	0	20
7440-70-2	Calcium	494	2.00	5.00	503	**168***	80 - 120	500	108	1	20
7440-47-3	Chromium	0.0	0.025	0.50	0.52	104	80 - 120	0.52	105	1	20
7440-48-4	Cobalt	0.0	0.025	0.50	0.49	99	80 - 120	0.49	99	0	20
7440-50-8	Copper	0.26	0.050	0.50	0.73	94	80 - 120	0.74	95	1	20
7439-89-6	Iron	0.12	0.50	5.00	5.00	98	80 - 120	5.17	101	3	20
7439-92-1	Lead	0.0	0.038	0.50	0.40	**79***	80 - 120	0.41	81	3	20
7439-95-4	Magnesium	838	0.50	5.00	845	**136***	80 - 120	849	**225***	1	20
7439-96-5	Manganese	0.0	0.038	0.50	0.52	103	80 - 120	0.52	105	2	20
7440-02-0	Nickel	0.017	0.10	0.50	0.52	101	80 - 120	0.53	102	2	20
7440-09-7	Potassium	23.5	1.25	10.0	34.5	109	80 - 120	34.9	114	1	20
7782-49-2	Selenium	0.025	0.10	0.50	0.51	97	80 - 120	0.52	99	1	20
7440-22-4	Silver	0.0	0.025	0.50	0.39	**78***	80 - 120	0.39	**79***	1	20
7440-23-5	Sodium	4560	2.50	20.0	4640	**426***	80 - 120	4740	**931***	2	20
7440-28-0	Thallium	0.0058	0.050	0.50	0.53	106	80 - 120	0.48	95	11	20
7440-62-2	Vanadium	0.55	0.050	0.50	1.06	103	80 - 120	1.08	107	2	20
7440-66-6	Zinc	0.16	0.050	0.50	0.47	**62***	80 - 120	0.48	**64***	3	20

General Chemistry Quality Control Summary

Analytical Batch 519497	**Client ID**	MB519497			LCS519497		
Prep Batch N/A	**GCAL ID**	1253930			1253931		
	Sample Type	Method Blank			LCS		
	Analytical Date	11/07/2013 14:50			11/07/2013 14:50		
	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	994	99	90 - 110

Analytical Batch 519497	**Client ID**	UNOX Effluent		1252179DUP		
Prep Batch N/A	**GCAL ID**	21311042606		1253932		
	Sample Type	SAMPLE		DUP		
	Analytical Date	11/07/2013 14:50		11/07/2013 14:50		
	Matrix	Water		Water		
SM 2540 C-2011		**Units**	mg/L	**Result**		**RPD**
		Result	**RDL**		**RPD**	**Limit**
WET-035	Total Dissolved Solids(TDS)	1970	4.39	1960	0	5

Analytical Batch 519497	**Client ID**	A-10		1252631DUP		
Prep Batch N/A	**GCAL ID**	21311053104		1253933		
	Sample Type	SAMPLE		DUP		
	Analytical Date	11/07/2013 14:50		11/07/2013 14:50		
	Matrix	Water		Water		
SM 2540 C-2011		**Units**	mg/L	**Result**		**RPD**
		Result	**RDL**		**RPD**	**Limit**
WET-035	Total Dissolved Solids(TDS)	1610	4.39	1600	1	5

Analytical Batch 519691	**Client ID**	MB519691			LCS519691		
Prep Batch N/A	**GCAL ID**	1255152			1255153		
	Sample Type	Method Blank			LCS		
	Analytical Date	11/09/2013 13:51			11/09/2013 13:51		
	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	991	99	90 - 110

General Chemistry Quality Control Summary

Analytical Batch 519691	**Client ID**	MW-08-06		1253283DUP		
Prep Batch N/A	**GCAL ID**	21311061105		1255154		
	Sample Type	SAMPLE		DUP		
	Analytical Date	11/09/2013 13:51		11/09/2013 13:51		
	Matrix	Water		Water		
SM 2540 C-2011		**Units**	mg/L	**Result**		**RPD**
		Result	**RDL**		**RPD**	**Limit**
WET-035	Total Dissolved Solids(TDS)	17600	43.9	17600	0	5

Analytical Batch 519691	**Client ID**	MRAA-07M		1254933DUP		
Prep Batch N/A	**GCAL ID**	21311085305		1255155		
	Sample Type	SAMPLE		DUP		
	Analytical Date	11/09/2013 13:51		11/09/2013 13:51		
	Matrix	Water		Water		
SM 2540 C-2011		**Units**	mg/L	**Result**		**RPD**
		Result	**RDL**		**RPD**	**Limit**
WET-035	Total Dissolved Solids(TDS)	1660	4.39	1650	1	5

Analytical Batch 519786	**Client ID**	MB519786			LCS519786		
Prep Batch N/A	**GCAL ID**	1255572			1255573		
	Sample Type	Method Blank			LCS		
	Analytical Date	11/11/2013 17:18			11/11/2013 17:18		
	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	958	96	90 - 110

Analytical Batch 519786	**Client ID**	SD08-MW13		1253280DUP		
Prep Batch N/A	**GCAL ID**	21311061102		1255574		
	Sample Type	SAMPLE		DUP		
	Analytical Date	11/11/2013 17:18		11/11/2013 17:18		
	Matrix	Water		Water		
SM 2540 C-2011		**Units**	mg/L	**Result**		**RPD**
		Result	**RDL**		**RPD**	**Limit**
WET-035	Total Dissolved Solids(TDS)	33500	43.9	33600	0	5

General Chemistry Quality Control Summary

Analytical Batch 519406	**Client ID**	MB519406			LCS519406		
Prep Batch N/A	**GCAL ID**	1253290			1253291		
	Sample Type	Method Blank			LCS		
	Analytical Date	11/06/2013 16:40			11/06/2013 16:22		
	Matrix	Water			Water		
EPA 300.0		**Units**	mg/L	**Spike**	**Result**		**Control**
		Result	**RDL**	**Added**		**% R**	**Limits % R**
14797-55-8	Nitrate	0.050U	0.050	2.50	2.38	95	80 - 120

Analytical Batch 519406	**Client ID**	MW-08-06			MW-08-06-MS			MW-08-06-MSD				
Prep Batch N/A	**GCAL ID**	21311061105			21311061106			21311061107				
	Sample Type	SAMPLE			MS			MSD				
	Analytical Date	11/06/2013 18:08			11/06/2013 18:25			11/06/2013 18:43				
	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**
14797-55-8	Nitrate	16.7	2.50	125	129	90	80 - 120	128	89	1		15

NATIONVIEW

Page: 1 of 1

NV Project No: 10-0004.01.010

COC Number(1): 11052013-1

LIMS Number:

Chain of Custody and Analytical Request

Facility/Base I.D.: Holloman Air Force Base, New Mexico

Project/Site Name: SD-08 Quarterly Groundwater Sampling (Q8)

Client Name: USACE Omaha District

Collected by: Tony Lucero / Brian Parrish

Sample Analysis Requested (5) | Quality Assurance Samples (6)

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)	Number of containers	VOCs (8260B)	TAL Metals [Dissolved] (6010B/7470A)	Mercury [Total] (6010B/7470A)	TDS (SM19 2540C)	Nitrate (300/9056)		Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
S10-MW6	S10-MW6	04-11-2013	1230	-	N	1	WG	7	Ξ	Ξ	Ξ	Ξ	Ξ					
SD08-MW13	SD08-MW13	04-11-2013	1350	-	N	1	WG	7	Ξ	Ξ	Ξ	Ξ	Ξ					
SD08-MW13A	SD08-MW13A	04-11-2013	1350	-	FD	1	WG	7	Ξ	Ξ	Ξ	Ξ	Ξ					
SD08-MW12	SD08-MW12	04-11-2013	1505		N	1	WG	7	Ξ	Ξ	Ξ	Ξ	Ξ					
MW-08-06	MW-08-06	05-11-2013	0800		N	1	WG	7	Ξ	Ξ	Ξ	Ξ	Ξ					
MW-08-06-MS	MW-08-06-MS	05-11-2013	0800		MS	1	WG	7	Ξ	Ξ	Ξ	Ξ	Ξ					
MW-08-06-MSD	MW-08-06-MSD	05-11-2013	0800	-	MSD	1	WG	7	Ξ	Ξ	Ξ	Ξ	Ξ					
MW-08-04	MW-08-04	05-11-2013	0950	-	N	1	WG	7	Ξ	Ξ	Ξ	Ξ	Ξ					
MW-08-05	MW-08-05	05-11-2013	1050	-	N	1	WG	7	Ξ	Ξ	Ξ	Ξ	Ξ					
S10-MW01	S10-MW01	05-11-2013	1155	-	N	1	WG	7	Ξ	Ξ	Ξ	Ξ	Ξ					
Trip Blank	FIELD QC			-	TB		AQ	1	Ξ									

1 2 3 4 5 6 7 8 9 10 11

Client ID: 4771 - NationView LLC
SDG: 213110611
Due Date: 11/15/13

COMMENTS: Dissolved TAL Metals filtered in the field

5.6 E22

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. Tony Lucero	11-5-2013	1600	1.		
2. Fed Ex	110613	1030	2. Bottey Law	110613	1030
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:		Shipped No.:	
Method of Shipment:	Fed Ex	Airbill Number:	797078969989
Analytical Lab:	GCAL	Delivery Location:	Baton Rogue, LA
Lab Recipient:		Delivery Date/Time:	

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)

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 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, 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 Analysis Requested: Analytical method requested and number of containers provided for each.

6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

GCAL ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIVING CHECKLIST

213110611

SAMPLE DELIVERY GROUP 213110611	
Client 4771 - NationView LLC	**Transport Method** FEDEX
Profile Number 204817	**Received By** Law, Brittany P.
Line Item(s) 3 - SD-08	**Receive Date(s)** 11/06/13

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)
7970 7896 9989		5.6

DISCREPANCIES

None

LAB PRESERVATIONS

None

NOTES

NELAP CERTIFICATE NUMBER 01955
DOD ELAP CERTIFICATE NUMBER L13-190

ANALYTICAL RESULTS

PERFORMED BY

GULF COAST ANALYTICAL LABORATORIES, INC.

7979 GSRI Avenue

Baton Rouge, LA 70820

Report Date 11/20/2013

GCAL Report 213110709

Deliver To	Nationview, LLC 7027 Old Madison Pike Suite 108 Huntsville, AL 35806 256-713-9494
Attn	Lance Williams

Project Holloman AFB SD-08

CASE NARRATIVE

Client: NationView LLC **Report:** 213110709

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 SW-846 6010C Dissolved analysis for prep batch 519524, the MS/MSD recoveries and RPDs are not applicable because the spike was diluted out of the samples.

In the EPA 6010C Dissolved analysis, a chemical or physical interference necessitated a dilution for samples 21311070901 (SWMU183-MW03), 21311070903 (SD08-MW11) and 21311070905 (MW-08-08). This is reflected in the elevated reporting limits.

CONVENTIONALS

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 or to eliminate a chemical or physical interference. This is reflected in the elevated reporting limits.

There was insufficient time to process the sample at receiving and to perform the Nitrate analysis for sample 21311070901 (SWMU183-MW03) within the 48-hour holding time. The client was notified.

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 213110709

THIS REPORT CONTAINS _____ PAGES.

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311070901	SWMU183-MW03	Water	11/05/2013 14:30	11/07/2013 10:30
21311070902	S10-MW02	Water	11/06/2013 08:35	11/07/2013 10:30
21311070903	SD08-MW11	Water	11/06/2013 09:45	11/07/2013 10:30
21311070904	SD08-MW10	Water	11/06/2013 10:50	11/07/2013 10:30
21311070905	MW-08-08	Water	11/06/2013 11:50	11/07/2013 10:30
21311070906	TRIP BLANK	Water	11/05/2013 00:00	11/07/2013 10:30

Summary of Compounds Detected

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311070901	**SWMU183-MW03**	Water	11/05/2013 14:30	11/07/2013 10:30

EPA 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-36-0	Antimony	0.23J	0.60	0.15	mg/L
7440-70-2	Calcium	499	8.00	2.00	mg/L
7439-95-4	Magnesium	237	2.00	0.50	mg/L
7439-96-5	Manganese	0.92	0.15	0.038	mg/L
7440-09-7	Potassium	6.68	5.00	1.25	mg/L
7440-22-4	Silver	0.047J	0.10	0.025	mg/L
7440-23-5	Sodium	962	10.0	2.50	mg/L
7440-62-2	Vanadium	0.094J	0.20	0.050	mg/L

EPA 300.0

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	23.0	4.00	1.00	mg/L

SM 2540 C-2011

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	3740	10.0	4.39	mg/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	Benzene	1.28J	5.00	0.111	ug/L
135-98-8	sec-Butylbenzene	1.75J	5.00	0.107	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311070902	**S10-MW02**	Water	11/06/2013 08:35	11/07/2013 10:30

EPA 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.013J	0.020	0.0050	mg/L
7440-39-3	Barium	0.011	0.010	0.0025	mg/L
7440-70-2	Calcium	533	0.80	0.20	mg/L
7440-47-3	Chromium	0.027	0.010	0.0025	mg/L
7440-50-8	Copper	0.021	0.020	0.0050	mg/L
7439-95-4	Magnesium	194	0.20	0.050	mg/L
7440-09-7	Potassium	22.6	0.50	0.13	mg/L
7440-23-5	Sodium	65.2	1.00	0.25	mg/L
7440-28-0	Thallium	0.0083J	0.020	0.0050	mg/L
7440-62-2	Vanadium	0.075	0.020	0.0050	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311070902	**S10-MW02**	Water	11/06/2013 08:35	11/07/2013 10:30

SM 2540 C-2011

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	3260	10.0	4.39	mg/L

EPA 300.0

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	16.8	1.00	0.250	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311070903	**SD08-MW11**	Water	11/06/2013 09:45	11/07/2013 10:30

EPA 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.026J	0.10	0.025	mg/L
7440-70-2	Calcium	487	8.00	2.00	mg/L
7439-92-1	Lead	0.040J	0.15	0.038	mg/L
7439-95-4	Magnesium	875	2.00	0.50	mg/L
7439-96-5	Manganese	2.30	0.15	0.038	mg/L
7440-09-7	Potassium	23.4	5.00	1.25	mg/L
7440-22-4	Silver	0.040J	0.10	0.025	mg/L
7440-23-5	Sodium	4670	10.0	2.50	mg/L
7440-62-2	Vanadium	0.13J	0.20	0.050	mg/L

SM 2540 C-2011

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	19400	100	43.9	mg/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
107-06-2	1,2-Dichloroethane	77.3	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	4.73J	5.00	0.150	ug/L
71-43-2	Benzene	1.38J	5.00	0.111	ug/L
98-82-8	Isopropylbenzene (Cumene)	1.38J	5.00	0.130	ug/L
135-98-8	sec-Butylbenzene	1.00J	5.00	0.107	ug/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311070904	**SD08-MW10**	Water	11/06/2013 10:50	11/07/2013 10:30

EPA 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.035	0.020	0.0050	mg/L
7440-39-3	Barium	0.023	0.010	0.0025	mg/L
7440-70-2	Calcium	505	0.80	0.20	mg/L
7440-47-3	Chromium	0.024	0.010	0.0025	mg/L
7440-48-4	Cobalt	0.0057J	0.010	0.0025	mg/L
7440-50-8	Copper	0.022	0.020	0.0050	mg/L
7439-89-6	Iron	1.27	0.20	0.050	mg/L
7439-95-4	Magnesium	259	0.20	0.050	mg/L
7439-96-5	Manganese	2.57	0.015	0.0038	mg/L
7440-09-7	Potassium	5.77	0.50	0.13	mg/L
7440-23-5	Sodium	226	1.00	0.25	mg/L
7440-28-0	Thallium	0.011J	0.020	0.0050	mg/L
7440-62-2	Vanadium	0.018J	0.020	0.0050	mg/L

SM 2540 C-2011

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	2210	10.0	4.39	mg/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	Benzene	62.9	5.00	0.111	ug/L
100-41-4	Ethylbenzene	1.94J	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	14.3	5.00	0.130	ug/L
103-65-1	n-Propylbenzene	30.6	5.00	0.727	ug/L
135-98-8	sec-Butylbenzene	2.83J	5.00	0.107	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311070905	**MW-08-08**	Water	11/06/2013 11:50	11/07/2013 10:30

EPA 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-70-2	Calcium	708	8.00	2.00	mg/L
7439-95-4	Magnesium	1210	2.00	0.50	mg/L
7439-96-5	Manganese	0.89	0.15	0.038	mg/L
7440-09-7	Potassium	49.9	5.00	1.25	mg/L
7440-22-4	Silver	0.035J	0.10	0.025	mg/L
7440-23-5	Sodium	5200	10.0	2.50	mg/L
7440-62-2	Vanadium	0.15J	0.20	0.050	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311070905	**MW-08-08**	Water	11/06/2013 11:50	11/07/2013 10:30

SM 2540 C-2011

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	**Total Dissolved Solids(TDS)**	**22600**	**100**	**43.9**	**mg/L**

EPA 300.0

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	**Nitrate**	**14.1**	**10.0**	**2.50**	**mg/L**

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	**Benzene**	**1.23J**	**5.00**	**0.111**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311070906	**TRIP BLANK**	Water	11/05/2013 00:00	11/07/2013 10:30

SW-846 8260B Water

CAS#	Parameter	Result	RDL	MDL	Units
75-09-2	**Methylene chloride**	**1.52J**	**5.00**	**0.149**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311070901	**SWMU183-MW03**	Water	11/05/2013 14:30	11/07/2013 10:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/13/2013 15:53	LBH	519940

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	5.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
563-58-6	1,1-Dichloropropene	0.052U	5.00	0.052	ug/L
96-18-4	1,2,3-Trichloropropane	0.065U	5.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.084U	5.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
540-59-0	1,2-Dichloroethene(Total)	0.180U	10.0	0.180	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.066U	5.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	0.059U	5.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	0.170U	5.00	0.170	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	0.080U	5.00	0.080	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	0.124U	5.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	0.070U	5.00	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**	**1.28J**	**5.00**	**0.111**	**ug/L**
108-86-1	Bromobenzene	0.145U	5.00	0.145	ug/L
74-97-5	Bromochloromethane	0.127U	5.00	0.127	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
74-95-3	Dibromomethane	0.211U	5.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	0.265U	5.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
74-88-4	Methyl iodide	0.084U	5.00	0.084	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
91-20-3	Naphthalene	0.176U	5.00	0.176	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311070901	**SWMU183-MW03**	Water	11/05/2013 14:30	11/07/2013 10:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/13/2013 15:53	LBH	519940

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	0.193U	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	0.161U	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
104-51-8	n-Butylbenzene	0.123U	5.00	0.123	ug/L
103-65-1	n-Propylbenzene	0.727U	5.00	0.727	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
135-98-8	**sec-Butylbenzene**	**1.75J**	**5.00**	**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	5.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	0.264U	5.00	0.264	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	48	ug/L	96	84 - 120
1868-53-7	Dibromofluoromethane	50	50.6	ug/L	101	87 - 116
2037-26-5	Toluene d8	50	52.2	ug/L	104	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	51.2	ug/L	102	76 - 127

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/07/2013 13:00	519523	EPA 7470A Dissolved	1	11/11/2013 16:01	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000070U	0.00020	0.000070	mg/L

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/07/2013 13:00	519523	EPA 7470A	1	11/11/2013 15:52	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000070U	0.00020	0.000070	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311070901	**SWMU183-MW03**	Water	11/05/2013 14:30	11/07/2013 10:30

EPA 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/07/2013 13:30	519524	EPA 3005 Dissolved	10	11/15/2013 15:44	CMB	520112

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	0.50U	2.00	0.50	mg/L
7440-36-0	**Antimony**	**0.23J**	**0.60**	**0.15**	**mg/L**
7440-38-2	Arsenic	0.050U	0.20	0.050	mg/L
7440-39-3	Barium	0.025U	0.10	0.025	mg/L
7440-41-7	Beryllium	0.010U	0.040	0.010	mg/L
7440-43-9	Cadmium	0.013U	0.050	0.013	mg/L
7440-70-2	**Calcium**	**499**	**8.00**	**2.00**	**mg/L**
7440-47-3	Chromium	0.025U	0.10	0.025	mg/L
7440-48-4	Cobalt	0.025U	0.10	0.025	mg/L
7440-50-8	Copper	0.050U	0.20	0.050	mg/L
7439-89-6	Iron	0.50U	2.00	0.50	mg/L
7439-92-1	Lead	0.038U	0.15	0.038	mg/L
7439-95-4	**Magnesium**	**237**	**2.00**	**0.50**	**mg/L**
7439-96-5	**Manganese**	**0.92**	**0.15**	**0.038**	**mg/L**
7440-02-0	Nickel	0.10U	0.40	0.10	mg/L
7440-09-7	**Potassium**	**6.68**	**5.00**	**1.25**	**mg/L**
7782-49-2	Selenium	0.10U	0.40	0.10	mg/L
7440-22-4	**Silver**	**0.047J**	**0.10**	**0.025**	**mg/L**
7440-23-5	**Sodium**	**962**	**10.0**	**2.50**	**mg/L**
7440-28-0	Thallium	0.050U	0.20	0.050	mg/L
7440-62-2	**Vanadium**	**0.094J**	**0.20**	**0.050**	**mg/L**
7440-66-6	Zinc	0.050U	0.20	0.050	mg/L

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/09/2013 13:51	BNW	519691

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	**Total Dissolved Solids(TDS)**	**3740**	**10.0**	**4.39**	**mg/L**

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			20	11/07/2013 19:34	JEM	519532

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	**Nitrate**	**23.0**	**4.00**	**1.00**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311070902	**S10-MW02**	Water	11/06/2013 08:35	11/07/2013 10:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/13/2013 16:14	LBH	519940

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	5.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
563-58-6	1,1-Dichloropropene	0.052U	5.00	0.052	ug/L
96-18-4	1,2,3-Trichloropropane	0.065U	5.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.084U	5.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
540-59-0	1,2-Dichloroethene(Total)	0.180U	10.0	0.180	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.066U	5.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	0.059U	5.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	0.170U	5.00	0.170	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	0.080U	5.00	0.080	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	0.124U	5.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	0.070U	5.00	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	5.00	0.111	ug/L
108-86-1	Bromobenzene	0.145U	5.00	0.145	ug/L
74-97-5	Bromochloromethane	0.127U	5.00	0.127	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
74-95-3	Dibromomethane	0.211U	5.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	0.265U	5.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
74-88-4	Methyl iodide	0.084U	5.00	0.084	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
91-20-3	Naphthalene	0.176U	5.00	0.176	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311070902	**S10-MW02**	Water	11/06/2013 08:35	11/07/2013 10:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/13/2013 16:14	LBH	519940

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	0.193U	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	0.161U	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
104-51-8	n-Butylbenzene	0.123U	5.00	0.123	ug/L
103-65-1	n-Propylbenzene	0.727U	5.00	0.727	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
135-98-8	sec-Butylbenzene	0.107U	5.00	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	5.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	0.264U	5.00	0.264	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	49.4	ug/L	99	84 - 120
1868-53-7	Dibromofluoromethane	50	50.3	ug/L	101	87 - 116
2037-26-5	Toluene d8	50	52.8	ug/L	106	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	49.2	ug/L	98	76 - 127

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/07/2013 13:00	519523	EPA 7470A Dissolved	1	11/11/2013 16:06	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000070U	0.00020	0.000070	mg/L

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/07/2013 13:00	519523	EPA 7470A	1	11/11/2013 15:54	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000070U	0.00020	0.000070	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311070902	**S10-MW02**	Water	11/06/2013 08:35	11/07/2013 10:30

EPA 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/07/2013 13:30	519524	EPA 3005 Dissolved	1	11/18/2013 18:23	CMB	520243

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	0.050U	0.20	0.050	mg/L
7440-36-0	Antimony	0.015U	0.060	0.015	mg/L
7440-38-2	**Arsenic**	**0.013J**	**0.020**	**0.0050**	**mg/L**
7440-39-3	**Barium**	**0.011**	**0.010**	**0.0025**	**mg/L**
7440-41-7	Beryllium	0.0010U	0.0040	0.0010	mg/L
7440-43-9	Cadmium	0.0013U	0.0050	0.0013	mg/L
7440-70-2	**Calcium**	**533**	**0.80**	**0.20**	**mg/L**
7440-47-3	**Chromium**	**0.027**	**0.010**	**0.0025**	**mg/L**
7440-48-4	Cobalt	0.0025U	0.010	0.0025	mg/L
7440-50-8	**Copper**	**0.021**	**0.020**	**0.0050**	**mg/L**
7439-89-6	Iron	0.050U	0.20	0.050	mg/L
7439-92-1	Lead	0.0038U	0.015	0.0038	mg/L
7439-95-4	**Magnesium**	**194**	**0.20**	**0.050**	**mg/L**
7439-96-5	Manganese	0.0038U	0.015	0.0038	mg/L
7440-02-0	Nickel	0.010U	0.040	0.010	mg/L
7440-09-7	**Potassium**	**22.6**	**0.50**	**0.13**	**mg/L**
7782-49-2	Selenium	0.010U	0.040	0.010	mg/L
7440-22-4	Silver	0.0025U	0.010	0.0025	mg/L
7440-23-5	**Sodium**	**65.2**	**1.00**	**0.25**	**mg/L**
7440-28-0	**Thallium**	**0.0083J**	**0.020**	**0.0050**	**mg/L**
7440-62-2	**Vanadium**	**0.075**	**0.020**	**0.0050**	**mg/L**
7440-66-6	Zinc	0.0050U	0.020	0.0050	mg/L

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/09/2013 13:51	BNW	519691

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	**Total Dissolved Solids(TDS)**	**3260**	**10.0**	**4.39**	**mg/L**

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			5	11/07/2013 20:27	JEM	519532

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	**Nitrate**	**16.8**	**1.00**	**0.250**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311070903	**SD08-MW11**	Water	11/06/2013 09:45	11/07/2013 10:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/13/2013 16:36	LBH	519940

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	5.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
563-58-6	1,1-Dichloropropene	0.052U	5.00	0.052	ug/L
96-18-4	1,2,3-Trichloropropane	0.065U	5.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.084U	5.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	**1,2-Dichloroethane**	**77.3**	**5.00**	**0.116**	**ug/L**
540-59-0	1,2-Dichloroethene(Total)	0.180U	10.0	0.180	ug/L
78-87-5	**1,2-Dichloropropane**	**4.73J**	**5.00**	**0.150**	**ug/L**
108-67-8	1,3,5-Trimethylbenzene	0.066U	5.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	0.059U	5.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	0.170U	5.00	0.170	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	0.080U	5.00	0.080	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	0.124U	5.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	0.070U	5.00	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**	**1.38J**	**5.00**	**0.111**	**ug/L**
108-86-1	Bromobenzene	0.145U	5.00	0.145	ug/L
74-97-5	Bromochloromethane	0.127U	5.00	0.127	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
74-95-3	Dibromomethane	0.211U	5.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	0.265U	5.00	0.265	ug/L
98-82-8	**Isopropylbenzene (Cumene)**	**1.38J**	**5.00**	**0.130**	**ug/L**
74-88-4	Methyl iodide	0.084U	5.00	0.084	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
91-20-3	Naphthalene	0.176U	5.00	0.176	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311070903	**SD08-MW11**	Water	11/06/2013 09:45	11/07/2013 10:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/13/2013 16:36	LBH	519940

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	0.193U	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	0.161U	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
104-51-8	n-Butylbenzene	0.123U	5.00	0.123	ug/L
103-65-1	n-Propylbenzene	0.727U	5.00	0.727	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
135-98-8	**sec-Butylbenzene**	**1.00J**	**5.00**	**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	5.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	0.264U	5.00	0.264	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	50.5	ug/L	101	84 - 120
1868-53-7	Dibromofluoromethane	50	49.4	ug/L	99	87 - 116
2037-26-5	Toluene d8	50	53.6	ug/L	107	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	48.8	ug/L	98	76 - 127

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/07/2013 13:00	519523	EPA 7470A Dissolved	1	11/11/2013 16:08	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000070U	0.00020	0.000070	mg/L

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/07/2013 13:00	519523	EPA 7470A	1	11/11/2013 15:55	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000070U	0.00020	0.000070	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311070903	**SD08-MW11**	Water	11/06/2013 09:45	11/07/2013 10:30

EPA 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/07/2013 13:30	519524	EPA 3005 Dissolved	10	11/15/2013 16:35	CMB	520112

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	0.50U	2.00	0.50	mg/L
7440-36-0	Antimony	0.15U	0.60	0.15	mg/L
7440-38-2	Arsenic	0.050U	0.20	0.050	mg/L
7440-39-3	**Barium**	**0.026J**	**0.10**	**0.025**	**mg/L**
7440-41-7	Beryllium	0.010U	0.040	0.010	mg/L
7440-43-9	Cadmium	0.013U	0.050	0.013	mg/L
7440-70-2	**Calcium**	**487**	**8.00**	**2.00**	**mg/L**
7440-47-3	Chromium	0.025U	0.10	0.025	mg/L
7440-48-4	Cobalt	0.025U	0.10	0.025	mg/L
7440-50-8	Copper	0.050U	0.20	0.050	mg/L
7439-89-6	Iron	0.50U	2.00	0.50	mg/L
7439-92-1	**Lead**	**0.040J**	**0.15**	**0.038**	**mg/L**
7439-95-4	**Magnesium**	**875**	**2.00**	**0.50**	**mg/L**
7439-96-5	**Manganese**	**2.30**	**0.15**	**0.038**	**mg/L**
7440-02-0	Nickel	0.10U	0.40	0.10	mg/L
7440-09-7	**Potassium**	**23.4**	**5.00**	**1.25**	**mg/L**
7782-49-2	Selenium	0.10U	0.40	0.10	mg/L
7440-22-4	**Silver**	**0.040J**	**0.10**	**0.025**	**mg/L**
7440-23-5	**Sodium**	**4670**	**10.0**	**2.50**	**mg/L**
7440-28-0	Thallium	0.050U	0.20	0.050	mg/L
7440-62-2	**Vanadium**	**0.13J**	**0.20**	**0.050**	**mg/L**
7440-66-6	Zinc	0.050U	0.20	0.050	mg/L

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	11/09/2013 13:51	BNW	519691

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	**Total Dissolved Solids(TDS)**	**19400**	**100**	**43.9**	**mg/L**

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			50	11/07/2013 20:44	JEM	519532

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	2.50U	10.0	2.50	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311070904	**SD08-MW10**	Water	11/06/2013 10:50	11/07/2013 10:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/13/2013 16:57	LBH	519940

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	5.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
563-58-6	1,1-Dichloropropene	0.052U	5.00	0.052	ug/L
96-18-4	1,2,3-Trichloropropane	0.065U	5.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.084U	5.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
540-59-0	1,2-Dichloroethene(Total)	0.180U	10.0	0.180	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.066U	5.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	0.059U	5.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	0.170U	5.00	0.170	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	0.080U	5.00	0.080	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	0.124U	5.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	0.070U	5.00	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**	**62.9**	**5.00**	**0.111**	**ug/L**
108-86-1	Bromobenzene	0.145U	5.00	0.145	ug/L
74-97-5	Bromochloromethane	0.127U	5.00	0.127	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
74-95-3	Dibromomethane	0.211U	5.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	**Ethylbenzene**	**1.94J**	**5.00**	**0.109**	**ug/L**
87-68-3	Hexachlorobutadiene	0.265U	5.00	0.265	ug/L
98-82-8	**Isopropylbenzene (Cumene)**	**14.3**	**5.00**	**0.130**	**ug/L**
74-88-4	Methyl iodide	0.084U	5.00	0.084	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
91-20-3	Naphthalene	0.176U	5.00	0.176	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311070904	**SD08-MW10**	Water	11/06/2013 10:50	11/07/2013 10:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/13/2013 16:57	LBH	519940

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	0.193U	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	0.161U	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
104-51-8	n-Butylbenzene	0.123U	5.00	0.123	ug/L
103-65-1	**n-Propylbenzene**	**30.6**	**5.00**	**0.727**	**ug/L**
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
135-98-8	**sec-Butylbenzene**	**2.83J**	**5.00**	**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	5.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	0.264U	5.00	0.264	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	49.8	ug/L	100	84 - 120
1868-53-7	Dibromofluoromethane	50	48.2	ug/L	96	87 - 116
2037-26-5	Toluene d8	50	53.6	ug/L	107	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	48.1	ug/L	96	76 - 127

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/07/2013 13:00	519523	EPA 7470A Dissolved	1	11/11/2013 16:10	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000070U	0.00020	0.000070	mg/L

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/07/2013 13:00	519523	EPA 7470A	1	11/11/2013 15:43	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000070U	0.00020	0.000070	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311070904	**SD08-MW10**	Water	11/06/2013 10:50	11/07/2013 10:30

EPA 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/07/2013 13:30	519524	EPA 3005 Dissolved	1	11/18/2013 18:31	CMB	520243

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	0.050U	0.20	0.050	mg/L
7440-36-0	Antimony	0.015U	0.060	0.015	mg/L
7440-38-2	**Arsenic**	**0.035**	**0.020**	**0.0050**	**mg/L**
7440-39-3	**Barium**	**0.023**	**0.010**	**0.0025**	**mg/L**
7440-41-7	Beryllium	0.0010U	0.0040	0.0010	mg/L
7440-43-9	Cadmium	0.0013U	0.0050	0.0013	mg/L
7440-70-2	**Calcium**	**505**	**0.80**	**0.20**	**mg/L**
7440-47-3	**Chromium**	**0.024**	**0.010**	**0.0025**	**mg/L**
7440-48-4	**Cobalt**	**0.0057J**	**0.010**	**0.0025**	**mg/L**
7440-50-8	**Copper**	**0.022**	**0.020**	**0.0050**	**mg/L**
7439-89-6	**Iron**	**1.27**	**0.20**	**0.050**	**mg/L**
7439-92-1	Lead	0.0038U	0.015	0.0038	mg/L
7439-95-4	**Magnesium**	**259**	**0.20**	**0.050**	**mg/L**
7439-96-5	**Manganese**	**2.57**	**0.015**	**0.0038**	**mg/L**
7440-02-0	Nickel	0.010U	0.040	0.010	mg/L
7440-09-7	**Potassium**	**5.77**	**0.50**	**0.13**	**mg/L**
7782-49-2	Selenium	0.010U	0.040	0.010	mg/L
7440-22-4	Silver	0.0025U	0.010	0.0025	mg/L
7440-23-5	**Sodium**	**226**	**1.00**	**0.25**	**mg/L**
7440-28-0	**Thallium**	**0.011J**	**0.020**	**0.0050**	**mg/L**
7440-62-2	**Vanadium**	**0.018J**	**0.020**	**0.0050**	**mg/L**
7440-66-6	Zinc	0.0050U	0.020	0.0050	mg/L

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/09/2013 13:51	BNW	519691

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	**Total Dissolved Solids(TDS)**	**2210**	**10.0**	**4.39**	**mg/L**

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			5	11/07/2013 21:02	JEM	519532

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	0.250U	1.00	0.250	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311070905	**MW-08-08**	Water	11/06/2013 11:50	11/07/2013 10:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/13/2013 17:18	LBH	519940

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	5.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
563-58-6	1,1-Dichloropropene	0.052U	5.00	0.052	ug/L
96-18-4	1,2,3-Trichloropropane	0.065U	5.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.084U	5.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
540-59-0	1,2-Dichloroethene(Total)	0.180U	10.0	0.180	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.066U	5.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	0.059U	5.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	0.170U	5.00	0.170	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	0.080U	5.00	0.080	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	0.124U	5.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	0.070U	5.00	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**	**1.23J**	**5.00**	**0.111**	**ug/L**
108-86-1	Bromobenzene	0.145U	5.00	0.145	ug/L
74-97-5	Bromochloromethane	0.127U	5.00	0.127	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
74-95-3	Dibromomethane	0.211U	5.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	0.265U	5.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
74-88-4	Methyl iodide	0.084U	5.00	0.084	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
91-20-3	Naphthalene	0.176U	5.00	0.176	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311070905	**MW-08-08**	Water	11/06/2013 11:50	11/07/2013 10:30

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/13/2013 17:18	LBH	519940

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	0.193U	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	0.161U	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
104-51-8	n-Butylbenzene	0.123U	5.00	0.123	ug/L
103-65-1	n-Propylbenzene	0.727U	5.00	0.727	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
135-98-8	sec-Butylbenzene	0.107U	5.00	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	5.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	0.264U	5.00	0.264	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	49.8	ug/L	100	84 - 120
1868-53-7	Dibromofluoromethane	50	51.1	ug/L	102	87 - 116
2037-26-5	Toluene d8	50	53	ug/L	106	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	50.4	ug/L	101	76 - 127

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/07/2013 13:00	519523	EPA 7470A Dissolved	1	11/11/2013 16:11	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000070U	0.00020	0.000070	mg/L

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/07/2013 13:00	519523	EPA 7470A	1	11/11/2013 15:57	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000070U	0.00020	0.000070	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311070905	**MW-08-08**	Water	11/06/2013 11:50	11/07/2013 10:30

EPA 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/07/2013 13:30	519524	EPA 3005 Dissolved	10	11/15/2013 16:48	CMB	520112

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	0.50U	2.00	0.50	mg/L
7440-36-0	Antimony	0.15U	0.60	0.15	mg/L
7440-38-2	Arsenic	0.050U	0.20	0.050	mg/L
7440-39-3	Barium	0.025U	0.10	0.025	mg/L
7440-41-7	Beryllium	0.010U	0.040	0.010	mg/L
7440-43-9	Cadmium	0.013U	0.050	0.013	mg/L
7440-70-2	**Calcium**	**708**	**8.00**	**2.00**	**mg/L**
7440-47-3	Chromium	0.025U	0.10	0.025	mg/L
7440-48-4	Cobalt	0.025U	0.10	0.025	mg/L
7440-50-8	Copper	0.050U	0.20	0.050	mg/L
7439-89-6	Iron	0.50U	2.00	0.50	mg/L
7439-92-1	Lead	0.038U	0.15	0.038	mg/L
7439-95-4	**Magnesium**	**1210**	**2.00**	**0.50**	**mg/L**
7439-96-5	**Manganese**	**0.89**	**0.15**	**0.038**	**mg/L**
7440-02-0	Nickel	0.10U	0.40	0.10	mg/L
7440-09-7	**Potassium**	**49.9**	**5.00**	**1.25**	**mg/L**
7782-49-2	Selenium	0.10U	0.40	0.10	mg/L
7440-22-4	**Silver**	**0.035J**	**0.10**	**0.025**	**mg/L**
7440-23-5	**Sodium**	**5200**	**10.0**	**2.50**	**mg/L**
7440-28-0	Thallium	0.050U	0.20	0.050	mg/L
7440-62-2	**Vanadium**	**0.15J**	**0.20**	**0.050**	**mg/L**
7440-66-6	Zinc	0.050U	0.20	0.050	mg/L

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	11/09/2013 13:51	BNW	519691

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	**Total Dissolved Solids(TDS)**	**22600**	**100**	**43.9**	**mg/L**

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			50	11/07/2013 21:37	JEM	519532

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	**Nitrate**	**14.1**	**10.0**	**2.50**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311070906	**TRIP BLANK**	Water	11/05/2013 00:00	11/07/2013 10:30

SW-846 8260B Water

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/13/2013 17:39	CLH	519940

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	5.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
563-58-6	1,1-Dichloropropene	0.052U	5.00	0.052	ug/L
96-18-4	1,2,3-Trichloropropane	0.065U	5.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.084U	5.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
540-59-0	1,2-Dichloroethene(Total)	0.180U	10.0	0.180	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.066U	5.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	0.059U	5.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	0.170U	5.00	0.170	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	0.080U	5.00	0.080	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	0.124U	5.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	0.070U	5.00	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	5.00	0.111	ug/L
108-86-1	Bromobenzene	0.145U	5.00	0.145	ug/L
74-97-5	Bromochloromethane	0.127U	5.00	0.127	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
74-95-3	Dibromomethane	0.211U	5.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	0.265U	5.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
74-88-4	Methyl iodide	0.084U	5.00	0.084	ug/L
75-09-2	**Methylene chloride**	**1.52J**	**5.00**	**0.149**	**ug/L**
91-20-3	Naphthalene	0.176U	5.00	0.176	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311070906	**TRIP BLANK**	Water	11/05/2013 00:00	11/07/2013 10:30

SW-846 8260B Water

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/13/2013 17:39	CLH	519940

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	0.193U	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	0.161U	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
104-51-8	n-Butylbenzene	0.123U	5.00	0.123	ug/L
103-65-1	n-Propylbenzene	0.727U	5.00	0.727	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
135-98-8	sec-Butylbenzene	0.107U	5.00	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	5.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	0.264U	5.00	0.264	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	49.1	ug/L	98	84 - 120
1868-53-7	Dibromofluoromethane	50	49.8	ug/L	100	87 - 116
2037-26-5	Toluene d8	50	52.7	ug/L	105	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	50.2	ug/L	100	76 - 127

GC/MS Volatiles Quality Control Summary

Analytical Batch 519940	**Client ID**	MB519940	LCS519940
Prep Batch N/A	**GCAL ID**	1256219	1256220
	Sample Type	Method Blank	LCS
	Analytical Date	11/13/2013 15:32	11/13/2013 13:45
	Matrix	Water	Water

EPA 8260B		**Units**	ug/L	**Spike**	**Result**		**Control**
		Result	**RDL**	**Added**		**% R**	**Limits % R**
67-64-1	Acetone	0.193U	0.193	50.0	44.8	90	59 - 134
74-97-5	Bromochloromethane	0.127U	0.127	50.0	54.9	110	78 - 112
75-27-4	Bromodichloromethane	0.083U	0.083	50.0	54.3	109	76 - 116
75-25-2	Bromoform	0.215U	0.215	50.0	56.4	113	68 - 128
74-83-9	Bromomethane	0.427U	0.427	50.0	53.7	107	55 - 151
75-15-0	Carbon disulfide	0.190U	0.190	50.0	52.6	105	67 - 147
56-23-5	Carbon tetrachloride	0.248U	0.248	50.0	50.7	101	74 - 139
75-00-3	Chloroethane	0.235U	0.235	50.0	44.5	89	54 - 166
136777-61-2	m,p-Xylene	0.123U	0.123	100	100	100	83 - 121
67-66-3	Chloroform	0.155U	0.155	50.0	52.3	105	85 - 123
74-87-3	Chloromethane	0.144U	0.144	50.0	54.7	109	55 - 173
124-48-1	Dibromochloromethane	0.054U	0.054	50.0	56.7	113	74 - 116
74-95-3	Dibromomethane	0.211U	0.211	50.0	54.0	108	81 - 116
75-71-8	Dichlorodifluoromethane	0.145U	0.145	50.0	54.5	109	34 - 158
75-34-3	1,1-Dichloroethane	0.171U	0.171	50.0	54.5	109	82 - 127
107-06-2	1,2-Dichloroethane	0.116U	0.116	50.0	53.3	107	76 - 122
156-59-2	cis-1,2-Dichloroethene	0.103U	0.103	50.0	55.5	111	81 - 114
156-60-5	trans-1,2-Dichloroethene	0.077U	0.077	50.0	56.6	113	82 - 126
75-09-2	Methylene chloride	0.149U	0.149	50.0	48.9	98	69 - 125
78-87-5	1,2-Dichloropropane	0.150U	0.150	50.0	55.6	111	81 - 120
10061-01-5	cis-1,3-Dichloropropene	0.124U	0.124	50.0	49.9	100	83 - 119
10061-02-6	trans-1,3-Dichloropropene	0.128U	0.128	50.0	49.5	99	87 - 123
100-41-4	Ethylbenzene	0.109U	0.109	50.0	56.6	113	87 - 118
591-78-6	2-Hexanone	0.122U	0.122	50.0	49.9	100	58 - 125
98-82-8	Isopropylbenzene (Cumene)	0.130U	0.130	50.0	63.6	127	87 - 131
78-93-3	2-Butanone	0.142U	0.142	50.0	51.9	104	61 - 127
74-88-4	Methyl iodide	0.084U	0.084	50.0	59.7	119	72 - 125
108-10-1	4-Methyl-2-pentanone	0.120U	0.120	50.0	56.1	112	62 - 125
103-65-1	n-Propylbenzene	0.727U	0.727	50.0	56.3	113	86 - 125
100-42-5	Styrene	0.089U	0.089	50.0	52.7	105	78 - 118
127-18-4	Tetrachloroethene	0.193U	0.193	50.0	58.4	117	80 - 131
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	0.120	50.0	55.2	110	81 - 119
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	0.109	50.0	51.2	102	71 - 120

GC/MS Volatiles Quality Control Summary

Analytical Batch 519940	**Client ID**	MB519940	LCS519940
Prep Batch N/A	**GCAL ID**	1256219	1256220
	Sample Type	Method Blank	LCS
	Analytical Date	11/13/2013 15:32	11/13/2013 13:45
	Matrix	Water	Water

EPA 8260B		**Units**	ug/L	**Spike**	**Result**		**Control**
		Result	**RDL**	**Added**		**% R**	**Limits % R**
120-82-1	1,2,4-Trichlorobenzene	0.105U	0.105	50.0	49.4	99	68 - 123
71-55-6	1,1,1-Trichloroethane	0.123U	0.123	50.0	50.7	101	79 - 133
79-00-5	1,1,2-Trichloroethane	0.159U	0.159	50.0	52.8	106	80 - 114
75-69-4	Trichlorofluoromethane	0.157U	0.157	50.0	48.3	97	66 - 156
96-18-4	1,2,3-Trichloropropane	0.065U	0.065	50.0	53.0	106	77 - 115
95-63-6	1,2,4-Trimethylbenzene	0.084U	0.084	50.0	52.8	106	82 - 120
108-67-8	1,3,5-Trimethylbenzene	0.066U	0.066	50.0	50.9	102	83 - 123
75-01-4	Vinyl chloride	0.127U	0.127	50.0	52.0	104	57 - 153
95-47-6	o-Xylene	0.055U	0.055	50.0	51.1	102	83 - 121
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	0.194	50.0	50.0	100	61 - 118
106-93-4	1,2-Dibromoethane	0.102U	0.102	50.0	57.7	115	80 - 115
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	0.078	50.0	56.1	112	75 - 116
540-59-0	1,2-Dichloroethene(Total)	0.180U	0.180	100	112	112	74 - 128
99-87-6	4-Isopropyltoluene	0.070U	0.070	50.0	52.6	105	83 - 125
1330-20-7	Xylene (total)	0.179U	0.179	150	152	101	74 - 127
110-57-6	trans-1,4-Dichloro-2-butene	0.264U	0.264	50.0	56.1	112	51 - 137
594-20-7	2,2-Dichloropropane	0.170U	0.170	50.0	50.8	102	77 - 138
76-13-1	Trichlorotrifluoroethane	0.158U	0.158	50.0	52.5	105	74 - 139
563-58-6	1,1-Dichloropropene	0.052U	0.052	50.0	50.2	100	87 - 127
142-28-9	1,3-Dichloropropane	0.059U	0.059	50.0	54.9	110	81 - 113
108-86-1	Bromobenzene	0.145U	0.145	50.0	53.1	106	83 - 115
95-49-8	2-Chlorotoluene	0.080U	0.080	50.0	55.1	110	81 - 121
106-43-4	4-Chlorotoluene	0.124U	0.124	50.0	57.1	114	84 - 120
98-06-6	tert-Butylbenzene	0.087U	0.087	50.0	52.3	105	83 - 126
135-98-8	sec-Butylbenzene	0.107U	0.107	50.0	53.5	107	86 - 127
541-73-1	1,3-Dichlorobenzene	0.138U	0.138	50.0	54.8	110	86 - 115
106-46-7	1,4-Dichlorobenzene	0.083U	0.083	50.0	54.5	109	87 - 113
104-51-8	n-Butylbenzene	0.123U	0.123	50.0	52.9	106	84 - 124
95-50-1	1,2-Dichlorobenzene	0.135U	0.135	50.0	55.1	110	85 - 115
87-68-3	Hexachlorobutadiene	0.265U	0.265	50.0	58.5	117	71 - 133
91-20-3	Naphthalene	0.176U	0.176	50.0	46.3	93	59 - 125
75-35-4	1,1-Dichloroethene	0.208U	0.208	50.0	46.4	93	75 - 133
71-43-2	Benzene	0.111U	0.111	50.0	51.1	102	83 - 124

GC/MS Volatiles Quality Control Summary

Analytical Batch 519940	**Client ID**	MB519940		LCS519940
Prep Batch N/A	**GCAL ID**	1256219		1256220
	Sample Type	Method Blank		LCS
	Analytical Date	11/13/2013 15:32		11/13/2013 13:45
	Matrix	Water		Water

EPA 8260B		**Units**	ug/L	**Spike**	**Result**		**Control**
		Result	**RDL**	**Added**		**% R**	**Limits % R**
79-01-6	Trichloroethene	0.161U	0.161	50.0	49.8	100	85 - 124
108-88-3	Toluene	0.122U	0.122	50.0	52.6	105	86 - 116
108-90-7	Chlorobenzene	0.083U	0.083	50.0	53.0	106	87 - 115
Surrogate							
460-00-4	4-Bromofluorobenzene	50	100	50	52.2	104	84 - 120
1868-53-7	Dibromofluoromethane	49.4	99	50	50	100	87 - 116
2037-26-5	Toluene d8	53.6	107	50	49.1	98	86 - 112
17060-07-0	1,2-Dichloroethane-d4	48.7	97	50	49	98	76 - 127

Inorganics Quality Control Summary

Analytical Batch 519696	**Client ID**	MB519523			LCS519523		
Prep Batch 519523	**GCAL ID**	1254136			1254137		
Prep Method EPA 7470A	**Sample Type**	Method Blank			LCS		
	Prep Date	11/07/2013 13:00			11/07/2013 13:00		
	Analytical Date	11/11/2013 15:36			11/11/2013 15:38		
	Matrix	Water			Water		
EPA 7470A Dissolved		**Units**	mg/L	**Spike**	**Result**		**Control**
		Result	**RDL**	**Added**		**% R**	**Limits % R**
7439-97-6 Mercury		0.000070U	0.000070	0.0050	0.0051	103	88 - 111

Analytical Batch 519696	**Client ID**	SD08-MW10			1254054MS			1254054MSD			
Prep Batch 519523	**GCAL ID**	21311070904			1254138			1254139			
Prep Method EPA 7470A	**Sample Type**	SAMPLE			MS			MSD			
	Prep Date	11/07/2013 13:00			11/07/2013 13:00			11/07/2013 13:00			
	Analytical Date	11/11/2013 15:43			11/11/2013 15:45			11/11/2013 15:47			
	Matrix	Water			Water			Water			
EPA 7470A Dissolved		**Units**	mg/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
7439-97-6 Mercury		0.0	0.000070	0.0050	0.0042	85	80 - 120	0.0043	87	3	20

Inorganics Quality Control Summary

Analytical Batch 519696	**Client ID**	MB519523			LCS519523		
Prep Batch 519523	**GCAL ID**	1254136			1254137		
Prep Method EPA 7470A	**Sample Type**	Method Blank			LCS		
	Prep Date	11/07/2013 13:00			11/07/2013 13:00		
	Analytical Date	11/11/2013 15:36			11/11/2013 15:38		
	Matrix	Water			Water		
EPA 7470A Dissolved		**Units**	mg/L	**Spike**	**Result**		**Control**
		Result	**RDL**	**Added**		**% R**	**Limits % R**
7439-97-6 Mercury		0.000070U	0.000070	0.0050	0.0051	103	88 - 111

Analytical Batch 519696	**Client ID**	SD08-MW10			1254054MS			1254054MSD			
Prep Batch 519523	**GCAL ID**	21311070904			1254138			1254139			
Prep Method EPA 7470A	**Sample Type**	SAMPLE			MS			MSD			
	Prep Date	11/07/2013 13:00			11/07/2013 13:00			11/07/2013 13:00			
	Analytical Date	11/11/2013 15:43			11/11/2013 15:45			11/11/2013 15:47			
	Matrix	Water			Water			Water			
EPA 7470A Dissolved		**Units**	mg/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
7439-97-6 Mercury		0.0	0.000070	0.0050	0.0042	85	80 - 120	0.0043	87	3	10

Inorganics Quality Control Summary

Analytical Batch	520112	**Client ID**	MB519524	LCS519524
Prep Batch	519524	**GCAL ID**	1254140	1254141
Prep Method	EPA 3005	**Sample Type**	Method Blank	LCS
	Dissolved	**Prep Date**	11/07/2013 13:30	11/07/2013 13:30
		Analytical Date	11/15/2013 15:17	11/15/2013 15:23
		Matrix	Water	Water

EPA 6010C Dissolved		**Units**	mg/L	**Spike**	**Result**		**Control**
		Result	**RDL**	**Added**		**% R**	**Limits % R**
7429-90-5	Aluminum	0.050U	0.050	5.00	4.78	96	80 - 120
7440-36-0	Antimony	0.015U	0.015	0.50	0.41	82	80 - 120
7440-38-2	Arsenic	0.0050U	0.0050	0.50	0.46	93	80 - 120
7440-39-3	Barium	0.0025U	0.0025	0.50	0.47	94	80 - 120
7440-41-7	Beryllium	0.0010U	0.0010	0.50	0.46	92	80 - 120
7440-43-9	Cadmium	0.0013U	0.0013	0.50	0.47	95	80 - 120
7440-70-2	Calcium	0.20U	0.20	5.00	4.72	94	80 - 120
7440-47-3	Chromium	0.0025U	0.0025	0.50	0.47	94	80 - 120
7440-48-4	Cobalt	0.0025U	0.0025	0.50	0.47	94	80 - 120
7440-50-8	Copper	0.0050U	0.0050	0.50	0.45	91	80 - 120
7439-89-6	Iron	0.050U	0.050	5.00	4.67	93	80 - 120
7439-92-1	Lead	0.0038U	0.0038	0.50	0.48	96	80 - 120
7439-95-4	Magnesium	0.050U	0.050	5.00	4.76	95	80 - 120
7439-96-5	Manganese	0.0054J	0.0038	0.50	0.47	95	80 - 120
7440-02-0	Nickel	0.010U	0.010	0.50	0.47	95	80 - 120
7440-09-7	Potassium	0.13U	0.13	10.0	9.39	94	80 - 120
7782-49-2	Selenium	0.010U	0.010	0.50	0.46	91	80 - 120
7440-22-4	Silver	0.0025U	0.0025	0.50	0.48	96	80 - 120
7440-23-5	Sodium	0.25U	0.25	20.0	19.5	97	80 - 120
7440-28-0	Thallium	0.0050U	0.0050	0.50	0.48	96	80 - 120
7440-62-2	Vanadium	0.0050U	0.0050	0.50	0.47	94	80 - 120
7440-66-6	Zinc	0.0050U	0.0050	0.50	0.48	96	80 - 120

Inorganics Quality Control Summary

Analytical Batch	520112	**Client ID**	SWMU183-MW03	1254042MS	1254042MSD
Prep Batch	519524	**GCAL ID**	21311070901	1254142	1254143
Prep Method	EPA 3005	**Sample Type**	SAMPLE	MS	MSD
	Dissolved	**Prep Date**	11/07/2013 13:30	11/07/2013 13:30	11/07/2013 13:30
		Analytical Date	11/15/2013 15:44	11/15/2013 15:50	11/15/2013 16:10
		Matrix	Water	Water	Water

EPA 6010C Dissolved		**Units**	mg/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
7429-90-5	Aluminum	0.058	0.50	5.00	4.67	92	80 - 120	5.10	101	9	20
7440-36-0	Antimony	0.23	0.15	0.50	0.53	**60***	80 - 120	0.58	**71***	10	20
7440-38-2	Arsenic	0.0	0.050	0.50	0.47	93	80 - 120	0.55	109	16	20
7440-39-3	Barium	0.0083	0.025	0.50	0.66	**131***	80 - 120	0.26	**50***	**87***	20
7440-41-7	Beryllium	0.0	0.010	0.50	0.47	94	80 - 120	0.54	108	14	20
7440-43-9	Cadmium	0.0	0.013	0.50	0.47	94	80 - 120	0.53	107	13	20
7440-70-2	Calcium	499	2.00	5.00	499	**1***	80 - 120	552	**1060***	10	20
7440-47-3	Chromium	0.0	0.025	0.50	0.43	86	80 - 120	0.51	102	17	20
7440-48-4	Cobalt	0.0073	0.025	0.50	0.48	95	80 - 120	0.55	108	13	20
7440-50-8	Copper	0.012	0.050	0.50	0.47	91	80 - 120	0.54	106	15	20
7439-89-6	Iron	0.0	0.50	5.00	4.80	96	80 - 120	5.39	108	12	20
7439-92-1	Lead	0.026	0.038	0.50	0.56	107	80 - 120	0.41	**77***	**31***	20
7439-95-4	Magnesium	237	0.50	5.00	244	**144***	80 - 120	262	**506***	7	20
7439-96-5	Manganese	0.92	0.038	0.50	1.36	87	80 - 120	1.56	**128***	14	20
7440-02-0	Nickel	0.0	0.10	0.50	0.48	97	80 - 120	0.55	111	14	20
7440-09-7	Potassium	6.68	1.25	10.0	15.8	91	80 - 120	17.3	106	9	20
7782-49-2	Selenium	0.0	0.10	0.50	0.38	**75***	80 - 120	0.43	87	14	20
7440-22-4	Silver	0.047	0.025	0.50	0.73	**136***	80 - 120	0.30	**50***	**84***	20
7440-23-5	Sodium	962	2.50	20.0	972	**50***	80 - 120	1070	**541***	10	20
7440-28-0	Thallium	0.0	0.050	0.50	0.42	84	80 - 120	0.53	106	**23***	20
7440-62-2	Vanadium	0.094	0.050	0.50	0.56	92	80 - 120	0.63	108	13	20
7440-66-6	Zinc	0.0	0.050	0.50	0.44	89	80 - 120	0.51	102	14	20

General Chemistry Quality Control Summary

Analytical Batch 519691	**Client ID**	MB519691			LCS519691		
Prep Batch N/A	**GCAL ID**	1255152			1255153		
	Sample Type	Method Blank			LCS		
	Analytical Date	11/09/2013 13:51			11/09/2013 13:51		
	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	991	99	90 - 110

Analytical Batch 519691	**Client ID**	MW-08-06		1253283DUP		
Prep Batch N/A	**GCAL ID**	21311061105		1255154		
	Sample Type	SAMPLE		DUP		
	Analytical Date	11/09/2013 13:51		11/09/2013 13:51		
	Matrix	Water		Water		
SM 2540 C-2011		**Units**	mg/L	**Result**		**RPD**
		Result	**RDL**		**RPD**	**Limit**
WET-035	Total Dissolved Solids(TDS)	17600	43.9	17600	0	5

Analytical Batch 519691	**Client ID**	MRAA-07M		1254933DUP		
Prep Batch N/A	**GCAL ID**	21311085305		1255155		
	Sample Type	SAMPLE		DUP		
	Analytical Date	11/09/2013 13:51		11/09/2013 13:51		
	Matrix	Water		Water		
SM 2540 C-2011		**Units**	mg/L	**Result**		**RPD**
		Result	**RDL**		**RPD**	**Limit**
WET-035	Total Dissolved Solids(TDS)	1660	4.39	1650	1	5

General Chemistry Quality Control Summary

Analytical Batch 519532	**Client ID**	MB519532			LCS519532		
Prep Batch N/A	**GCAL ID**	1254163			1254164		
	Sample Type	Method Blank			LCS		
	Analytical Date	11/08/2013 09:57			11/07/2013 19:16		
	Matrix	Water			Water		
EPA 300.0		**Units**	mg/L	**Spike**	**Result**		**Control**
		Result	**RDL**	**Added**		**% R**	**Limits % R**
14797-55-8	Nitrate	0.050U	0.050	2.50	2.39	96	80 - 120

Analytical Batch 519532	**Client ID**	SWMU183-MW03			1254042MS			1254042MSD			
Prep Batch N/A	**GCAL ID**	21311070901			1254165			1254166			
	Sample Type	SAMPLE			MS			MSD			
	Analytical Date	11/07/2013 19:34			11/07/2013 19:51			11/07/2013 20:09			
	Matrix	Water			Water			Water			
EPA 300.0		**Units**	mg/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
14797-55-8	Nitrate	23.0	1.00	50.0	68.6	91	80 - 120	68.4	91	0	15

NATIONVIEW

3,4 E20

Page: 1 of 1

NV Project No: 10-0004

COC Number(1): 11062013-1

LIMS Number:

Chain of Custody and Analytical Request

Facility/Base I.D.: Holloman Air Force Base, New Mexico

Project/Site Name: SD-08 Quarterly Groundwater Sampling (Q8)

Client Name: USACE Omaha District

Collected by: Tony Lucero / Brian Parrish

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)	Number of containers	VOCs (8260B)	TAL Metals [Dissolved] (6010B/7470A)	Mercury [Total] (6010B/7470A)	TDS (SM19 2540C)	Nitrate (300/9056)				Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
								Sample Analysis Requested (5)									Quality Assurance Samples (6)			
SWMU183-MW03	SWMU183-MW03	05112013	1430	-	N	1	WG	7	[1]	[1]	[1]	[1]	[1]							
S10-MW02	S10-MW02	06112013	0835	-	N	1	WG	7	[1]	[1]	[1]	[1]	[1]							
SD08-MW11	SD08-MW11	06112013	0945	-	N	1	WG	7	[1]	[1]	[1]	[1]	[1]							
SD08-MW10	SD08-MW10	06112013	1050		N	1	WG	7	[1]	[1]	[1]	[1]	[1]							
MW-08-08	MW-08-08	06112013	1150		N	1	WG	7	[1]	[1]	[1]	[1]	[1]							
Trip Blank	FIELD QC			-	TB		AQ	1	[1]											

COMMENTS: **Dissolved TAL Metals filtered in the field**

Client ID: 4771 - NationView LLC

SDG: 213110709

Due Date: 11/18/13

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. Tony Lucero	11062013	1600	1.		
2. FedEx	11/7/13	1030	2. [signature]	11/7/13	1030
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: Shipped No.:

Method of Shipment: Fed Ex Airbill Number: 797092179628

Analytical Lab: GCAL Delivery Location: Baton Rogue, LA

Lab Recipient: Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)

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 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, 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 Analysis Requested: Analytical method requested and number of containers provided for each.

6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

GCAL ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIVING CHECKLIST

213110709

SAMPLE DELIVERY GROUP 213110709	
Client 4771 - NationView LLC	**Transport Method** FEDEX
Profile Number 204817	**Received By** Law, Brittany P.
Line Item(s) 3 - SD-08	**Receive Date(s)** 11/07/13

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: E20	Temp(°C)
7970 9217 9628		3.4

DISCREPANCIES

None

LAB PRESERVATIONS

None

NOTES

NELAP CERTIFICATE NUMBER 01955
DOD ELAP CERTIFICATE NUMBER L13-190

ANALYTICAL RESULTS

PERFORMED BY

GULF COAST ANALYTICAL LABORATORIES, INC.

7979 GSRI Avenue

Baton Rouge, LA 70820

Report Date 11/22/2013

GCAL Report 213110809

Deliver To	Nationview, LLC 7027 Old Madison Pike Suite 108 Huntsville, AL 35806 256-713-9494
Attn	Lance Williams

Project Holloman AFB SD-08

CASE NARRATIVE

Client: NationView LLC **Report:** 213110809

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 6010C Dissolved analysis for prep batch 519605, the MS and/or MSD recovery is outside the control limits for Barium, Lead, 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 103% Barium, 94% Lead, and 95% Silver. The MS/MSD recoveries are not applicable for Calcium, Magnesium, and Sodium because the sample concentration is greater than four times the spike concentration. The MS/MSD RPD for Silver is above the upper control limit. Sodium was detected in the method blank. The concentration was insignificant as compared to the concentration detected in the associated samples.

In the EPA 6010C Dissolved analysis, a chemical or physical interference necessitated a dilution for samples 21311080903 (MW-08-03), 21311080904 (MW-08-01) and 21311080905 (MW-08-01A). This is reflected in the elevated reporting limits.

CONVENTIONALS

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 or to eliminate a chemical or physical interference. This is reflected in the elevated reporting limits.

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 213110809

THIS REPORT CONTAINS _____ PAGES.

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311080901	MW-08-07	Water	11/06/2013 13:35	11/08/2013 09:45
21311080902	MW-08-02	Water	11/06/2013 14:35	11/08/2013 09:45
21311080903	MW-08-03	Water	11/07/2013 08:55	11/08/2013 09:45
21311080904	MW-08-01	Water	11/07/2013 09:55	11/08/2013 09:45
21311080905	MW-08-01A	Water	11/07/2013 09:55	11/08/2013 09:45
21311080906	TRIP BLANK	Water	11/06/2013 00:00	11/08/2013 09:45

Summary of Compounds Detected

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311080901	**MW-08-07**	Water	11/06/2013 13:35	11/08/2013 09:45

EPA 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.040	0.020	0.0050	mg/L
7440-39-3	Barium	0.012	0.010	0.0025	mg/L
7440-70-2	Calcium	575	0.80	0.20	mg/L
7440-47-3	Chromium	0.028	0.010	0.0025	mg/L
7440-48-4	Cobalt	0.0035J	0.010	0.0025	mg/L
7440-50-8	Copper	0.021	0.020	0.0050	mg/L
7439-89-6	Iron	0.067J	0.20	0.050	mg/L
7439-95-4	Magnesium	195	0.20	0.050	mg/L
7439-96-5	Manganese	1.35	0.015	0.0038	mg/L
7440-09-7	Potassium	5.57	0.50	0.13	mg/L
7440-23-5	Sodium	440	1.00	0.25	mg/L
7440-28-0	Thallium	0.014J	0.020	0.0050	mg/L
7440-62-2	Vanadium	0.039	0.020	0.0050	mg/L

EPA 300.0

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	1.49	1.00	0.250	mg/L

SM 2540 C-2011

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	3080	10.0	4.39	mg/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
107-06-2	1,2-Dichloroethane	30.5	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.809J	5.00	0.150	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311080902	**MW-08-02**	Water	11/06/2013 14:35	11/08/2013 09:45

EPA 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.014J	0.020	0.0050	mg/L
7440-39-3	Barium	0.015	0.010	0.0025	mg/L
7440-70-2	Calcium	593	0.80	0.20	mg/L
7440-47-3	Chromium	0.029	0.010	0.0025	mg/L
7440-48-4	Cobalt	0.0042J	0.010	0.0025	mg/L
7440-50-8	Copper	0.021	0.020	0.0050	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311080902	**MW-08-02**	Water	11/06/2013 14:35	11/08/2013 09:45

EPA 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7439-89-6	Iron	1.15	0.20	0.050	mg/L
7439-95-4	Magnesium	167	0.20	0.050	mg/L
7439-96-5	Manganese	1.62	0.015	0.0038	mg/L
7440-09-7	Potassium	4.06	0.50	0.13	mg/L
7440-23-5	Sodium	163	1.00	0.25	mg/L
7440-28-0	Thallium	0.012J	0.020	0.0050	mg/L
7440-62-2	Vanadium	0.021	0.020	0.0050	mg/L

SM 2540 C-2011

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	2990	10.0	4.39	mg/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
107-06-2	1,2-Dichloroethane	4.02J	5.00	0.116	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311080903	**MW-08-03**	Water	11/07/2013 08:55	11/08/2013 09:45

EPA 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-70-2	Calcium	540	8.00	2.00	mg/L
7439-95-4	Magnesium	719	2.00	0.50	mg/L
7440-09-7	Potassium	16.6	5.00	1.25	mg/L
7440-22-4	Silver	0.030J	0.10	0.025	mg/L
7440-23-5	Sodium	2660	10.0	2.50	mg/L
7440-62-2	Vanadium	0.16J	0.20	0.050	mg/L

SM 2540 C-2011

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	16400	10.0	4.39	mg/L

EPA 300.0

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	11.6	4.00	1.00	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311080904	**MW-08-01**	Water	11/07/2013 09:55	11/08/2013 09:45

EPA 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-70-2	Calcium	490	8.00	2.00	mg/L
7439-89-6	Iron	8.10	2.00	0.50	mg/L
7439-95-4	Magnesium	597	2.00	0.50	mg/L
7439-96-5	Manganese	2.59	0.15	0.038	mg/L
7440-09-7	Potassium	5.08	5.00	1.25	mg/L
7440-23-5	Sodium	1830	10.0	2.50	mg/L
7440-62-2	Vanadium	0.092J	0.20	0.050	mg/L
7440-66-6	Zinc	0.052J	0.20	0.050	mg/L

SM 2540 C-2011

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	5710	10.0	4.39	mg/L

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
95-50-1	1,2-Dichlorobenzene	0.257J	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	26.1	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	5.25	5.00	0.150	ug/L
67-64-1	Acetone	5.74	5.00	0.193	ug/L
71-43-2	Benzene	1.25J	5.00	0.111	ug/L
100-41-4	Ethylbenzene	0.785J	5.00	0.109	ug/L
135-98-8	sec-Butylbenzene	0.341J	5.00	0.107	ug/L
98-06-6	tert-Butylbenzene	0.832J	5.00	0.087	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311080905	**MW-08-01A**	Water	11/07/2013 09:55	11/08/2013 09:45

EPA 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-70-2	Calcium	477	8.00	2.00	mg/L
7439-89-6	Iron	7.97	2.00	0.50	mg/L
7439-95-4	Magnesium	593	2.00	0.50	mg/L
7439-96-5	Manganese	2.62	0.15	0.038	mg/L
7440-09-7	Potassium	4.48J	5.00	1.25	mg/L
7440-22-4	Silver	0.043J	0.10	0.025	mg/L
7440-23-5	Sodium	1770	10.0	2.50	mg/L
7440-62-2	Vanadium	0.11J	0.20	0.050	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311080905	**MW-08-01A**	Water	11/07/2013 09:55	11/08/2013 09:45

EPA 8260B

CAS#	Parameter	Result	RDL	MDL	Units
95-50-1	1,2-Dichlorobenzene	0.258J	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	42.2	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	6.47	5.00	0.150	ug/L
67-64-1	Acetone	4.55J	5.00	0.193	ug/L
71-43-2	Benzene	0.534J	5.00	0.111	ug/L
100-41-4	Ethylbenzene	0.276J	5.00	0.109	ug/L
135-98-8	sec-Butylbenzene	0.370J	5.00	0.107	ug/L
98-06-6	tert-Butylbenzene	0.837J	5.00	0.087	ug/L

SM 2540 C-2011

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	5610	10.0	4.39	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311080906	**TRIP BLANK**	Water	11/06/2013 00:00	11/08/2013 09:45

SW-846 8260B Water

CAS#	Parameter	Result	RDL	MDL	Units
75-09-2	Methylene chloride	1.40J	5.00	0.149	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311080901	**MW-08-07**	Water	11/06/2013 13:35	11/08/2013 09:45

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/15/2013 20:32	JCK	520149

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	5.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
563-58-6	1,1-Dichloropropene	0.052U	5.00	0.052	ug/L
96-18-4	1,2,3-Trichloropropane	0.065U	5.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.084U	5.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	**1,2-Dichloroethane**	**30.5**	**5.00**	**0.116**	**ug/L**
540-59-0	1,2-Dichloroethene(Total)	0.180U	10.0	0.180	ug/L
78-87-5	**1,2-Dichloropropane**	**0.809J**	**5.00**	**0.150**	**ug/L**
108-67-8	1,3,5-Trimethylbenzene	0.066U	5.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	0.059U	5.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	0.170U	5.00	0.170	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	0.080U	5.00	0.080	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	0.124U	5.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	0.070U	5.00	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	5.00	0.111	ug/L
108-86-1	Bromobenzene	0.145U	5.00	0.145	ug/L
74-97-5	Bromochloromethane	0.127U	5.00	0.127	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
74-95-3	Dibromomethane	0.211U	5.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	0.265U	5.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
74-88-4	Methyl iodide	0.084U	5.00	0.084	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
91-20-3	Naphthalene	0.176U	5.00	0.176	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311080901	**MW-08-07**	Water	11/06/2013 13:35	11/08/2013 09:45

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/15/2013 20:32	JCK	520149

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	0.193U	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	0.161U	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
104-51-8	n-Butylbenzene	0.123U	5.00	0.123	ug/L
103-65-1	n-Propylbenzene	0.727U	5.00	0.727	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
135-98-8	sec-Butylbenzene	0.107U	5.00	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	5.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	0.264U	5.00	0.264	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	51.7	ug/L	103	84 - 120
1868-53-7	Dibromofluoromethane	50	49.2	ug/L	98	87 - 116
2037-26-5	Toluene d8	50	52.6	ug/L	105	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	49.7	ug/L	99	76 - 127

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/08/2013 13:45	519608	EPA 7470A Dissolved	1	11/11/2013 14:51	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000070U	0.00020	0.000070	mg/L

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/08/2013 13:45	519608	EPA 7470A	1	11/11/2013 14:39	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000070U	0.00020	0.000070	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311080901	**MW-08-07**	Water	11/06/2013 13:35	11/08/2013 09:45

EPA 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/08/2013 16:15	519605	EPA 3005 Dissolved	1	11/18/2013 17:26	CMB	520243

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	0.050U	0.20	0.050	mg/L
7440-36-0	Antimony	0.015U	0.060	0.015	mg/L
7440-38-2	**Arsenic**	**0.040**	**0.020**	**0.0050**	**mg/L**
7440-39-3	**Barium**	**0.012**	**0.010**	**0.0025**	**mg/L**
7440-41-7	Beryllium	0.0010U	0.0040	0.0010	mg/L
7440-43-9	Cadmium	0.0013U	0.0050	0.0013	mg/L
7440-70-2	**Calcium**	**575**	**0.80**	**0.20**	**mg/L**
7440-47-3	**Chromium**	**0.028**	**0.010**	**0.0025**	**mg/L**
7440-48-4	**Cobalt**	**0.0035J**	**0.010**	**0.0025**	**mg/L**
7440-50-8	**Copper**	**0.021**	**0.020**	**0.0050**	**mg/L**
7439-89-6	**Iron**	**0.067J**	**0.20**	**0.050**	**mg/L**
7439-92-1	Lead	0.0038U	0.015	0.0038	mg/L
7439-95-4	**Magnesium**	**195**	**0.20**	**0.050**	**mg/L**
7439-96-5	**Manganese**	**1.35**	**0.015**	**0.0038**	**mg/L**
7440-02-0	Nickel	0.010U	0.040	0.010	mg/L
7440-09-7	**Potassium**	**5.57**	**0.50**	**0.13**	**mg/L**
7782-49-2	Selenium	0.010U	0.040	0.010	mg/L
7440-22-4	Silver	0.0025U	0.010	0.0025	mg/L
7440-23-5	**Sodium**	**440**	**1.00**	**0.25**	**mg/L**
7440-28-0	**Thallium**	**0.014J**	**0.020**	**0.0050**	**mg/L**
7440-62-2	**Vanadium**	**0.039**	**0.020**	**0.0050**	**mg/L**
7440-66-6	Zinc	0.0050U	0.020	0.0050	mg/L

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/09/2013 13:51	BNW	519691

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	**Total Dissolved Solids(TDS)**	**3080**	**10.0**	**4.39**	**mg/L**

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			5	11/08/2013 12:40	AEL	519612

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	**Nitrate**	**1.49**	**1.00**	**0.250**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311080902	**MW-08-02**	Water	11/06/2013 14:35	11/08/2013 09:45

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/15/2013 20:54	JCK	520149

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	5.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
563-58-6	1,1-Dichloropropene	0.052U	5.00	0.052	ug/L
96-18-4	1,2,3-Trichloropropane	0.065U	5.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.084U	5.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	**1,2-Dichloroethane**	**4.02J**	**5.00**	**0.116**	**ug/L**
540-59-0	1,2-Dichloroethene(Total)	0.180U	10.0	0.180	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.066U	5.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	0.059U	5.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	0.170U	5.00	0.170	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	0.080U	5.00	0.080	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	0.124U	5.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	0.070U	5.00	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	5.00	0.111	ug/L
108-86-1	Bromobenzene	0.145U	5.00	0.145	ug/L
74-97-5	Bromochloromethane	0.127U	5.00	0.127	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
74-95-3	Dibromomethane	0.211U	5.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	0.265U	5.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
74-88-4	Methyl iodide	0.084U	5.00	0.084	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
91-20-3	Naphthalene	0.176U	5.00	0.176	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311080902	**MW-08-02**	Water	11/06/2013 14:35	11/08/2013 09:45

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/15/2013 20:54	JCK	520149

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	0.193U	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	0.161U	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
104-51-8	n-Butylbenzene	0.123U	5.00	0.123	ug/L
103-65-1	n-Propylbenzene	0.727U	5.00	0.727	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
135-98-8	sec-Butylbenzene	0.107U	5.00	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	5.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	0.264U	5.00	0.264	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	50.9	ug/L	102	84 - 120
1868-53-7	Dibromofluoromethane	50	49.4	ug/L	99	87 - 116
2037-26-5	Toluene d8	50	53.4	ug/L	107	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	49.6	ug/L	99	76 - 127

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/08/2013 13:45	519608	EPA 7470A Dissolved	1	11/11/2013 14:53	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000070U	0.00020	0.000070	mg/L

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/08/2013 13:45	519608	EPA 7470A	1	11/11/2013 14:41	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000070U	0.00020	0.000070	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311080902	**MW-08-02**	Water	11/06/2013 14:35	11/08/2013 09:45

EPA 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/08/2013 16:15	519605	EPA 3005 Dissolved	1	11/18/2013 18:16	CMB	520243

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	0.050U	0.20	0.050	mg/L
7440-36-0	Antimony	0.015U	0.060	0.015	mg/L
7440-38-2	**Arsenic**	**0.014J**	**0.020**	**0.0050**	**mg/L**
7440-39-3	**Barium**	**0.015**	**0.010**	**0.0025**	**mg/L**
7440-41-7	Beryllium	0.0010U	0.0040	0.0010	mg/L
7440-43-9	Cadmium	0.0013U	0.0050	0.0013	mg/L
7440-70-2	**Calcium**	**593**	**0.80**	**0.20**	**mg/L**
7440-47-3	**Chromium**	**0.029**	**0.010**	**0.0025**	**mg/L**
7440-48-4	**Cobalt**	**0.0042J**	**0.010**	**0.0025**	**mg/L**
7440-50-8	**Copper**	**0.021**	**0.020**	**0.0050**	**mg/L**
7439-89-6	**Iron**	**1.15**	**0.20**	**0.050**	**mg/L**
7439-92-1	Lead	0.0038U	0.015	0.0038	mg/L
7439-95-4	**Magnesium**	**167**	**0.20**	**0.050**	**mg/L**
7439-96-5	**Manganese**	**1.62**	**0.015**	**0.0038**	**mg/L**
7440-02-0	Nickel	0.010U	0.040	0.010	mg/L
7440-09-7	**Potassium**	**4.06**	**0.50**	**0.13**	**mg/L**
7782-49-2	Selenium	0.010U	0.040	0.010	mg/L
7440-22-4	Silver	0.0025U	0.010	0.0025	mg/L
7440-23-5	**Sodium**	**163**	**1.00**	**0.25**	**mg/L**
7440-28-0	**Thallium**	**0.012J**	**0.020**	**0.0050**	**mg/L**
7440-62-2	**Vanadium**	**0.021**	**0.020**	**0.0050**	**mg/L**
7440-66-6	Zinc	0.0050U	0.020	0.0050	mg/L

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/09/2013 13:51	BNW	519691

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	**Total Dissolved Solids(TDS)**	**2990**	**10.0**	**4.39**	**mg/L**

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			5	11/08/2013 13:33	AEL	519612

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	0.250U	1.00	0.250	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311080903	**MW-08-03**	Water	11/07/2013 08:55	11/08/2013 09:45

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/15/2013 21:16	JCK	520149

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	5.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
563-58-6	1,1-Dichloropropene	0.052U	5.00	0.052	ug/L
96-18-4	1,2,3-Trichloropropane	0.065U	5.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.084U	5.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
540-59-0	1,2-Dichloroethene(Total)	0.180U	10.0	0.180	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.066U	5.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	0.059U	5.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	0.170U	5.00	0.170	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	0.080U	5.00	0.080	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	0.124U	5.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	0.070U	5.00	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	5.00	0.111	ug/L
108-86-1	Bromobenzene	0.145U	5.00	0.145	ug/L
74-97-5	Bromochloromethane	0.127U	5.00	0.127	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
74-95-3	Dibromomethane	0.211U	5.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	0.265U	5.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
74-88-4	Methyl iodide	0.084U	5.00	0.084	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
91-20-3	Naphthalene	0.176U	5.00	0.176	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311080903	**MW-08-03**	Water	11/07/2013 08:55	11/08/2013 09:45

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/15/2013 21:16	JCK	520149

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	0.193U	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	0.161U	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
104-51-8	n-Butylbenzene	0.123U	5.00	0.123	ug/L
103-65-1	n-Propylbenzene	0.727U	5.00	0.727	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
135-98-8	sec-Butylbenzene	0.107U	5.00	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	5.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	0.264U	5.00	0.264	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	50.9	ug/L	102	84 - 120
1868-53-7	Dibromofluoromethane	50	50.4	ug/L	101	87 - 116
2037-26-5	Toluene d8	50	53.2	ug/L	106	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	50.8	ug/L	102	76 - 127

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/08/2013 13:45	519608	EPA 7470A Dissolved	1	11/11/2013 14:58	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000070U	0.00020	0.000070	mg/L

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/08/2013 13:45	519608	EPA 7470A	1	11/11/2013 14:28	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000070U	0.00020	0.000070	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311080903	**MW-08-03**	Water	11/07/2013 08:55	11/08/2013 09:45

EPA 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/08/2013 16:15	519605	EPA 3005 Dissolved	10	11/15/2013 18:00	CMB	520112

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	0.50U	2.00	0.50	mg/L
7440-36-0	Antimony	0.15U	0.60	0.15	mg/L
7440-38-2	Arsenic	0.050U	0.20	0.050	mg/L
7440-39-3	Barium	0.025U	0.10	0.025	mg/L
7440-41-7	Beryllium	0.010U	0.040	0.010	mg/L
7440-43-9	Cadmium	0.013U	0.050	0.013	mg/L
7440-70-2	**Calcium**	**540**	**8.00**	**2.00**	**mg/L**
7440-47-3	Chromium	0.025U	0.10	0.025	mg/L
7440-48-4	Cobalt	0.025U	0.10	0.025	mg/L
7440-50-8	Copper	0.050U	0.20	0.050	mg/L
7439-89-6	Iron	0.50U	2.00	0.50	mg/L
7439-92-1	Lead	0.038U	0.15	0.038	mg/L
7439-95-4	**Magnesium**	**719**	**2.00**	**0.50**	**mg/L**
7439-96-5	Manganese	0.038U	0.15	0.038	mg/L
7440-02-0	Nickel	0.10U	0.40	0.10	mg/L
7440-09-7	**Potassium**	**16.6**	**5.00**	**1.25**	**mg/L**
7782-49-2	Selenium	0.10U	0.40	0.10	mg/L
7440-22-4	**Silver**	**0.030J**	**0.10**	**0.025**	**mg/L**
7440-23-5	**Sodium**	**2660**	**10.0**	**2.50**	**mg/L**
7440-28-0	Thallium	0.050U	0.20	0.050	mg/L
7440-62-2	**Vanadium**	**0.16J**	**0.20**	**0.050**	**mg/L**
7440-66-6	Zinc	0.050U	0.20	0.050	mg/L

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/11/2013 17:18	BNW	519786

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	**Total Dissolved Solids(TDS)**	**16400**	**10.0**	**4.39**	**mg/L**

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			20	11/08/2013 13:50	AEL	519612

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	**Nitrate**	**11.6**	**4.00**	**1.00**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311080904	**MW-08-01**	Water	11/07/2013 09:55	11/08/2013 09:45

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/15/2013 21:38	JCK	520149

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	5.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
563-58-6	1,1-Dichloropropene	0.052U	5.00	0.052	ug/L
96-18-4	1,2,3-Trichloropropane	0.065U	5.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.084U	5.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	**1,2-Dichlorobenzene**	**0.257J**	**5.00**	**0.135**	**ug/L**
107-06-2	**1,2-Dichloroethane**	**26.1**	**5.00**	**0.116**	**ug/L**
540-59-0	1,2-Dichloroethene(Total)	0.180U	10.0	0.180	ug/L
78-87-5	**1,2-Dichloropropane**	**5.25**	**5.00**	**0.150**	**ug/L**
108-67-8	1,3,5-Trimethylbenzene	0.066U	5.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	0.059U	5.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	0.170U	5.00	0.170	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	0.080U	5.00	0.080	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	0.124U	5.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	0.070U	5.00	0.070	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	**Acetone**	**5.74**	**5.00**	**0.193**	**ug/L**
71-43-2	**Benzene**	**1.25J**	**5.00**	**0.111**	**ug/L**
108-86-1	Bromobenzene	0.145U	5.00	0.145	ug/L
74-97-5	Bromochloromethane	0.127U	5.00	0.127	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
74-95-3	Dibromomethane	0.211U	5.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	**Ethylbenzene**	**0.785J**	**5.00**	**0.109**	**ug/L**
87-68-3	Hexachlorobutadiene	0.265U	5.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
74-88-4	Methyl iodide	0.084U	5.00	0.084	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
91-20-3	Naphthalene	0.176U	5.00	0.176	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311080904	**MW-08-01**	Water	11/07/2013 09:55	11/08/2013 09:45

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/15/2013 21:38	JCK	520149

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	0.193U	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	0.161U	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
104-51-8	n-Butylbenzene	0.123U	5.00	0.123	ug/L
103-65-1	n-Propylbenzene	0.727U	5.00	0.727	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
135-98-8	**sec-Butylbenzene**	**0.341J**	**5.00**	**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**	**0.832J**	**5.00**	**0.087**	**ug/L**
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	0.264U	5.00	0.264	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	50.5	ug/L	101	84 - 120
1868-53-7	Dibromofluoromethane	50	47.5	ug/L	95	87 - 116
2037-26-5	Toluene d8	50	52.6	ug/L	105	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	47.8	ug/L	96	76 - 127

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/08/2013 13:45	519608	EPA 7470A Dissolved	1	11/11/2013 15:00	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000070U	0.00020	0.000070	mg/L

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/08/2013 13:45	519608	EPA 7470A	1	11/11/2013 14:43	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000070U	0.00020	0.000070	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311080904	**MW-08-01**	Water	11/07/2013 09:55	11/08/2013 09:45

EPA 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/08/2013 16:15	519605	EPA 3005 Dissolved	10	11/15/2013 18:07	CMB	520112

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	0.50U	2.00	0.50	mg/L
7440-36-0	Antimony	0.15U	0.60	0.15	mg/L
7440-38-2	Arsenic	0.050U	0.20	0.050	mg/L
7440-39-3	Barium	0.025U	0.10	0.025	mg/L
7440-41-7	Beryllium	0.010U	0.040	0.010	mg/L
7440-43-9	Cadmium	0.013U	0.050	0.013	mg/L
7440-70-2	**Calcium**	**490**	**8.00**	**2.00**	**mg/L**
7440-47-3	Chromium	0.025U	0.10	0.025	mg/L
7440-48-4	Cobalt	0.025U	0.10	0.025	mg/L
7440-50-8	Copper	0.050U	0.20	0.050	mg/L
7439-89-6	**Iron**	**8.10**	**2.00**	**0.50**	**mg/L**
7439-92-1	Lead	0.038U	0.15	0.038	mg/L
7439-95-4	**Magnesium**	**597**	**2.00**	**0.50**	**mg/L**
7439-96-5	**Manganese**	**2.59**	**0.15**	**0.038**	**mg/L**
7440-02-0	Nickel	0.10U	0.40	0.10	mg/L
7440-09-7	**Potassium**	**5.08**	**5.00**	**1.25**	**mg/L**
7782-49-2	Selenium	0.10U	0.40	0.10	mg/L
7440-22-4	Silver	0.025U	0.10	0.025	mg/L
7440-23-5	**Sodium**	**1830**	**10.0**	**2.50**	**mg/L**
7440-28-0	Thallium	0.050U	0.20	0.050	mg/L
7440-62-2	**Vanadium**	**0.092J**	**0.20**	**0.050**	**mg/L**
7440-66-6	**Zinc**	**0.052J**	**0.20**	**0.050**	**mg/L**

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/11/2013 17:18	BNW	519786

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	**Total Dissolved Solids(TDS)**	**5710**	**10.0**	**4.39**	**mg/L**

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	11/08/2013 14:07	AEL	519612

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	0.500U	2.00	0.500	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311080905	**MW-08-01A**	Water	11/07/2013 09:55	11/08/2013 09:45

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/15/2013 22:01	JCK	520149

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	5.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
563-58-6	1,1-Dichloropropene	0.052U	5.00	0.052	ug/L
96-18-4	1,2,3-Trichloropropane	0.065U	5.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.084U	5.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	**1,2-Dichlorobenzene**	**0.258J**	**5.00**	**0.135**	**ug/L**
107-06-2	**1,2-Dichloroethane**	**42.2**	**5.00**	**0.116**	**ug/L**
540-59-0	1,2-Dichloroethene(Total)	0.180U	10.0	0.180	ug/L
78-87-5	**1,2-Dichloropropane**	**6.47**	**5.00**	**0.150**	**ug/L**
108-67-8	1,3,5-Trimethylbenzene	0.066U	5.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	0.059U	5.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	0.170U	5.00	0.170	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	0.080U	5.00	0.080	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	0.124U	5.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	0.070U	5.00	0.070	ug/L
108-10-1	4-Methyl-2-pentanone	0.120U	5.00	0.120	ug/L
67-64-1	**Acetone**	**4.55J**	**5.00**	**0.193**	**ug/L**
71-43-2	**Benzene**	**0.534J**	**5.00**	**0.111**	**ug/L**
108-86-1	Bromobenzene	0.145U	5.00	0.145	ug/L
74-97-5	Bromochloromethane	0.127U	5.00	0.127	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
74-95-3	Dibromomethane	0.211U	5.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	**Ethylbenzene**	**0.276J**	**5.00**	**0.109**	**ug/L**
87-68-3	Hexachlorobutadiene	0.265U	5.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
74-88-4	Methyl iodide	0.084U	5.00	0.084	ug/L
75-09-2	Methylene chloride	0.149U	5.00	0.149	ug/L
91-20-3	Naphthalene	0.176U	5.00	0.176	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311080905	**MW-08-01A**	Water	11/07/2013 09:55	11/08/2013 09:45

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/15/2013 22:01	JCK	520149

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	0.193U	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	0.161U	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
104-51-8	n-Butylbenzene	0.123U	5.00	0.123	ug/L
103-65-1	n-Propylbenzene	0.727U	5.00	0.727	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
135-98-8	**sec-Butylbenzene**	**0.370J**	**5.00**	**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**	**0.837J**	**5.00**	**0.087**	**ug/L**
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	0.264U	5.00	0.264	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	50.9	ug/L	102	84 - 120
1868-53-7	Dibromofluoromethane	50	47.4	ug/L	95	87 - 116
2037-26-5	Toluene d8	50	52.3	ug/L	105	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	48	ug/L	96	76 - 127

EPA 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/08/2013 13:45	519608	EPA 7470A Dissolved	1	11/11/2013 15:02	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000070U	0.00020	0.000070	mg/L

EPA 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/08/2013 13:45	519608	EPA 7470A	1	11/11/2013 14:44	BAM	519696

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000070U	0.00020	0.000070	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311080905	**MW-08-01A**	Water	11/07/2013 09:55	11/08/2013 09:45

EPA 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
11/08/2013 16:15	519605	EPA 3005 Dissolved	10	11/15/2013 18:14	CMB	520112

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	0.50U	2.00	0.50	mg/L
7440-36-0	Antimony	0.15U	0.60	0.15	mg/L
7440-38-2	Arsenic	0.050U	0.20	0.050	mg/L
7440-39-3	Barium	0.025U	0.10	0.025	mg/L
7440-41-7	Beryllium	0.010U	0.040	0.010	mg/L
7440-43-9	Cadmium	0.013U	0.050	0.013	mg/L
7440-70-2	**Calcium**	**477**	**8.00**	**2.00**	**mg/L**
7440-47-3	Chromium	0.025U	0.10	0.025	mg/L
7440-48-4	Cobalt	0.025U	0.10	0.025	mg/L
7440-50-8	Copper	0.050U	0.20	0.050	mg/L
7439-89-6	**Iron**	**7.97**	**2.00**	**0.50**	**mg/L**
7439-92-1	Lead	0.038U	0.15	0.038	mg/L
7439-95-4	**Magnesium**	**593**	**2.00**	**0.50**	**mg/L**
7439-96-5	**Manganese**	**2.62**	**0.15**	**0.038**	**mg/L**
7440-02-0	Nickel	0.10U	0.40	0.10	mg/L
7440-09-7	**Potassium**	**4.48J**	**5.00**	**1.25**	**mg/L**
7782-49-2	Selenium	0.10U	0.40	0.10	mg/L
7440-22-4	**Silver**	**0.043J**	**0.10**	**0.025**	**mg/L**
7440-23-5	**Sodium**	**1770**	**10.0**	**2.50**	**mg/L**
7440-28-0	Thallium	0.050U	0.20	0.050	mg/L
7440-62-2	**Vanadium**	**0.11J**	**0.20**	**0.050**	**mg/L**
7440-66-6	Zinc	0.050U	0.20	0.050	mg/L

SM 2540 C-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/14/2013 17:19	BNW	520062

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	**Total Dissolved Solids(TDS)**	**5610**	**10.0**	**4.39**	**mg/L**

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	11/08/2013 14:25	AEL	519612

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	0.500U	2.00	0.500	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311080906	**TRIP BLANK**	Water	11/06/2013 00:00	11/08/2013 09:45

SW-846 8260B Water

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/15/2013 22:23	JCK	520149

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	5.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	0.123U	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	0.159U	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	0.171U	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	0.208U	5.00	0.208	ug/L
563-58-6	1,1-Dichloropropene	0.052U	5.00	0.052	ug/L
96-18-4	1,2,3-Trichloropropane	0.065U	5.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.105U	5.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.084U	5.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	0.102U	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	0.135U	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	0.116U	5.00	0.116	ug/L
540-59-0	1,2-Dichloroethene(Total)	0.180U	10.0	0.180	ug/L
78-87-5	1,2-Dichloropropane	0.150U	5.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	0.066U	5.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	0.138U	5.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	0.059U	5.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	0.083U	5.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	0.170U	5.00	0.170	ug/L
78-93-3	2-Butanone	0.142U	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	0.080U	5.00	0.080	ug/L
591-78-6	2-Hexanone	0.122U	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	0.124U	5.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	0.070U	5.00	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	5.00	0.111	ug/L
108-86-1	Bromobenzene	0.145U	5.00	0.145	ug/L
74-97-5	Bromochloromethane	0.127U	5.00	0.127	ug/L
75-27-4	Bromodichloromethane	0.083U	5.00	0.083	ug/L
75-25-2	Bromoform	0.215U	5.00	0.215	ug/L
74-83-9	Bromomethane	0.427U	5.00	0.427	ug/L
75-15-0	Carbon disulfide	0.190U	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	0.248U	5.00	0.248	ug/L
108-90-7	Chlorobenzene	0.083U	5.00	0.083	ug/L
75-00-3	Chloroethane	0.235U	5.00	0.235	ug/L
67-66-3	Chloroform	0.155U	5.00	0.155	ug/L
74-87-3	Chloromethane	0.144U	5.00	0.144	ug/L
124-48-1	Dibromochloromethane	0.054U	5.00	0.054	ug/L
74-95-3	Dibromomethane	0.211U	5.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	0.145U	5.00	0.145	ug/L
100-41-4	Ethylbenzene	0.109U	5.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	0.265U	5.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	0.130U	5.00	0.130	ug/L
74-88-4	Methyl iodide	0.084U	5.00	0.084	ug/L
75-09-2	**Methylene chloride**	**1.40J**	**5.00**	**0.149**	**ug/L**
91-20-3	Naphthalene	0.176U	5.00	0.176	ug/L
100-42-5	Styrene	0.089U	5.00	0.089	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21311080906	**TRIP BLANK**	Water	11/06/2013 00:00	11/08/2013 09:45

SW-846 8260B Water

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	11/15/2013 22:23	JCK	520149

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	0.193U	5.00	0.193	ug/L
108-88-3	Toluene	0.122U	5.00	0.122	ug/L
79-01-6	Trichloroethene	0.161U	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	0.157U	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	0.158U	5.00	0.158	ug/L
75-01-4	Vinyl chloride	0.127U	5.00	0.127	ug/L
1330-20-7	Xylene (total)	0.179U	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	0.103U	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.124U	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	0.123U	10.0	0.123	ug/L
104-51-8	n-Butylbenzene	0.123U	5.00	0.123	ug/L
103-65-1	n-Propylbenzene	0.727U	5.00	0.727	ug/L
95-47-6	o-Xylene	0.055U	5.00	0.055	ug/L
135-98-8	sec-Butylbenzene	0.107U	5.00	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	5.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	0.077U	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	0.128U	5.00	0.128	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	0.264U	5.00	0.264	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	51.9	ug/L	104	84 - 120
1868-53-7	Dibromofluoromethane	50	50	ug/L	100	87 - 116
2037-26-5	Toluene d8	50	53.6	ug/L	107	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	48.4	ug/L	97	76 - 127

GC/MS Volatiles Quality Control Summary

Analytical Batch	520149	**Client ID**	MB520149			LCS520149			LCSD520149		
Prep Batch	N/A	**GCAL ID**	1257174			1257175			1257176		
		Sample Type	Method Blank			LCS			LCSD		
		Analytical Date	11/15/2013 19:04			11/15/2013 17:35			11/15/2013 17:58		
		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	49.0	98	59 - 134	51.2	102	4	30
74-97-5	Bromochloromethane	0.127U	0.127	50.0	50.6	101	78 - 112	49.1	98	3	30
75-27-4	Bromodichloromethane	0.083U	0.083	50.0	48.5	97	76 - 116	46.9	94	3	30
75-25-2	Bromoform	0.215U	0.215	50.0	52.3	105	68 - 128	52.6	105	1	30
74-83-9	Bromomethane	0.427U	0.427	50.0	51.7	103	55 - 151	51.9	104	0	30
75-15-0	Carbon disulfide	0.190U	0.190	50.0	50.1	100	67 - 147	45.3	91	10	30
56-23-5	Carbon tetrachloride	0.248U	0.248	50.0	48.4	97	74 - 139	46.1	92	5	30
75-00-3	Chloroethane	0.235U	0.235	50.0	44.0	88	54 - 166	41.0	82	7	30
136777-61-2	m,p-Xylene	0.123U	0.123	100	107	107	83 - 121	102	102	5	30
67-66-3	Chloroform	0.155U	0.155	50.0	47.1	94	85 - 123	45.2	90	4	30
74-87-3	Chloromethane	0.144U	0.144	50.0	47.7	95	55 - 173	44.5	89	7	30
124-48-1	Dibromochloromethane	0.054U	0.054	50.0	49.4	99	74 - 116	49.1	98	1	30
74-95-3	Dibromomethane	0.211U	0.211	50.0	48.0	96	81 - 116	47.6	95	1	30
75-71-8	Dichlorodifluoromethane	0.145U	0.145	50.0	47.8	96	34 - 158	44.5	89	7	30
75-34-3	1,1-Dichloroethane	0.171U	0.171	50.0	48.0	96	82 - 127	46.2	92	4	30
107-06-2	1,2-Dichloroethane	0.116U	0.116	50.0	47.4	95	76 - 122	46.2	92	3	30
156-59-2	cis-1,2-Dichloroethene	0.103U	0.103	50.0	51.5	103	81 - 114	49.5	99	4	30
156-60-5	trans-1,2-Dichloroethene	0.077U	0.077	50.0	51.3	103	82 - 126	47.7	95	7	30
75-09-2	Methylene chloride	0.149U	0.149	50.0	45.9	92	69 - 125	43.2	86	6	30
78-87-5	1,2-Dichloropropane	0.150U	0.150	50.0	49.8	100	81 - 120	47.6	95	5	30
10061-01-5	cis-1,3-Dichloropropene	0.124U	0.124	50.0	53.4	107	83 - 119	51.5	103	4	30
10061-02-6	trans-1,3-Dichloropropene	0.128U	0.128	50.0	51.9	104	87 - 123	50.6	101	3	30
100-41-4	Ethylbenzene	0.109U	0.109	50.0	50.8	102	87 - 118	48.8	98	4	30
591-78-6	2-Hexanone	0.122U	0.122	50.0	54.3	109	58 - 125	55.4	111	2	30
98-82-8	Isopropylbenzene (Cumene)	0.130U	0.130	50.0	55.5	111	87 - 131	51.3	103	8	30
78-93-3	2-Butanone	0.142U	0.142	50.0	52.5	105	61 - 127	51.8	104	1	30
74-88-4	Methyl iodide	0.084U	0.084	50.0	48.2	96	72 - 125	47.6	95	1	30
108-10-1	4-Methyl-2-pentanone	0.120U	0.120	50.0	49.7	99	62 - 125	51.2	102	3	30
103-65-1	n-Propylbenzene	0.727U	0.727	50.0	53.9	108	86 - 125	49.3	99	9	30
100-42-5	Styrene	0.089U	0.089	50.0	53.8	108	78 - 118	51.7	103	4	30
127-18-4	Tetrachloroethene	0.193U	0.193	50.0	51.2	102	80 - 131	47.8	96	7	30
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	0.120	50.0	48.4	97	81 - 119	47.7	95	1	30
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	0.109	50.0	51.6	103	71 - 120	51.3	103	1	30

GC/MS Volatiles Quality Control Summary

Analytical Batch	520149	**Client ID**	MB520149			LCS520149			LCSD520149		
Prep Batch	N/A	**GCAL ID**	1257174			1257175			1257176		
		Sample Type	Method Blank			LCS			LCSD		
		Analytical Date	11/15/2013 19:04			11/15/2013 17:35			11/15/2013 17:58		
		Matrix	Water			Water			Water		
EPA 8260B		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
120-82-1	1,2,4-Trichlorobenzene	0.105U	0.105	50.0	60.9	122	68 - 123	54.4	109	11	30
71-55-6	1,1,1-Trichloroethane	0.123U	0.123	50.0	48.6	97	79 - 133	46.2	92	5	30
79-00-5	1,1,2-Trichloroethane	0.159U	0.159	50.0	48.0	96	80 - 114	47.7	95	1	30
75-69-4	Trichlorofluoromethane	0.157U	0.157	50.0	49.0	98	66 - 156	46.3	93	6	30
96-18-4	1,2,3-Trichloropropane	0.065U	0.065	50.0	47.0	94	77 - 115	46.9	94	0	30
95-63-6	1,2,4-Trimethylbenzene	0.084U	0.084	50.0	57.1	114	82 - 120	52.6	105	8	30
108-67-8	1,3,5-Trimethylbenzene	0.066U	0.066	50.0	55.8	112	83 - 123	51.3	103	8	30
75-01-4	Vinyl chloride	0.127U	0.127	50.0	51.1	102	57 - 153	45.9	92	11	30
95-47-6	o-Xylene	0.055U	0.055	50.0	55.9	112	83 - 121	53.1	106	5	30
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	0.194	50.0	50.8	102	61 - 118	51.4	103	1	30
106-93-4	1,2-Dibromoethane	0.102U	0.102	50.0	50.3	101	80 - 115	49.7	99	1	30
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	0.078	50.0	52.5	105	75 - 116	51.9	104	1	30
540-59-0	1,2-Dichloroethene(Total)	0.180U	0.180	100	103	103	74 - 128	97.3	97	6	30
99-87-6	4-Isopropyltoluene	0.070U	0.070	50.0	59.2	118	83 - 125	52.9	106	11	30
1330-20-7	Xylene (total)	0.179U	0.179	150	163	109	74 - 127	155	103	5	30
110-57-6	trans-1,4-Dichloro-2-butene	0.264U	0.264	50.0	52.3	105	51 - 137	51.5	103	2	30
594-20-7	2,2-Dichloropropane	0.170U	0.170	50.0	51.8	104	77 - 138	48.8	98	6	30
76-13-1	Trichlorotrifluoroethane	0.158U	0.158	50.0	48.4	97	74 - 139	45.7	91	6	30
563-58-6	1,1-Dichloropropene	0.052U	0.052	50.0	51.2	102	87 - 127	48.7	97	5	30
142-28-9	1,3-Dichloropropane	0.059U	0.059	50.0	49.7	99	81 - 113	49.1	98	1	30
108-86-1	Bromobenzene	0.145U	0.145	50.0	50.0	100	83 - 115	47.5	95	5	30
95-49-8	2-Chlorotoluene	0.080U	0.080	50.0	54.0	108	81 - 121	50.1	100	7	30
106-43-4	4-Chlorotoluene	0.124U	0.124	50.0	54.1	108	84 - 120	50.8	102	6	30
98-06-6	tert-Butylbenzene	0.087U	0.087	50.0	56.9	114	83 - 126	51.5	103	10	30
135-98-8	sec-Butylbenzene	0.107U	0.107	50.0	57.0	114	86 - 127	50.9	102	11	30
541-73-1	1,3-Dichlorobenzene	0.138U	0.138	50.0	52.3	105	86 - 115	48.8	98	7	30
106-46-7	1,4-Dichlorobenzene	0.083U	0.083	50.0	50.1	100	87 - 113	46.6	93	7	30
104-51-8	n-Butylbenzene	0.123U	0.123	50.0	58.7	117	84 - 124	51.5	103	13	30
95-50-1	1,2-Dichlorobenzene	0.135U	0.135	50.0	52.7	105	85 - 115	49.6	99	6	30
87-68-3	Hexachlorobutadiene	0.265U	0.265	50.0	60.2	120	71 - 133	51.7	103	15	30
91-20-3	Naphthalene	0.176U	0.176	50.0	52.2	104	59 - 125	50.3	101	4	35
75-35-4	1,1-Dichloroethene	0.208U	0.208	50.0	50.4	101	75 - 133	47.5	95	6	20
71-43-2	Benzene	0.111U	0.111	50.0	50.3	101	83 - 124	48.2	96	4	20

GC/MS Volatiles Quality Control Summary

Analytical Batch	520149	**Client ID**	MB520149	LCS520149	LCSD520149
Prep Batch	N/A	**GCAL ID**	1257174	1257175	1257176
		Sample Type	Method Blank	LCS	LCSD
		Analytical Date	11/15/2013 19:04	11/15/2013 17:35	11/15/2013 17:58
		Matrix	Water	Water	Water

EPA 8260B		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
79-01-6	Trichloroethene	0.161U	0.161	50.0	50.2	100	85 - 124	47.5	95	6	20
108-88-3	Toluene	0.122U	0.122	50.0	49.5	99	86 - 116	47.1	94	5	20
108-90-7	Chlorobenzene	0.083U	0.083	50.0	48.5	97	87 - 115	46.6	93	4	20
Surrogate											
460-00-4	4-Bromofluorobenzene	52	104	50	50.6	101	84 - 120	51.2	102		
1868-53-7	Dibromofluoromethane	49.3	99	50	49.4	99	87 - 116	49.5	99		
2037-26-5	Toluene d8	52.5	105	50	49.7	99	86 - 112	50.2	100		
17060-07-0	1,2-Dichloroethane-d4	48.5	97	50	47.9	96	76 - 127	48.2	96		

Inorganics Quality Control Summary

Analytical Batch	519696	**Client ID**	MW-08-03			1254596MS			1254596MSD		
Prep Batch	519608	**GCAL ID**	21311080903			1254647			1254648		
Prep Method	EPA 7470A	**Sample Type**	SAMPLE			MS			MSD		
		Prep Date	11/08/2013 13:45			11/08/2013 13:45			11/08/2013 13:45		
		Analytical Date	11/11/2013 14:28			11/11/2013 14:30			11/11/2013 14:32		
		Matrix	Water			Water			Water		
EPA 7470A		**Units**	mg/L		**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**		**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
7439-97-6	Mercury	0.0	0.000070		0.0050	0.0042	83	80 - 120	0.0040	80	3	10

Analytical Batch	519806	**Client ID**	MB519608			LCS519608		
Prep Batch	519608	**GCAL ID**	1254645			1254646		
Prep Method	EPA 7470A	**Sample Type**	Method Blank			LCS		
		Prep Date	11/08/2013 13:45			11/08/2013 13:45		
		Analytical Date	11/11/2013 14:25			11/12/2013 11:52		
		Matrix	Water			Water		
EPA 7470A		**Units**	mg/L		**Spike**	**Result**		**Control**
		Result	**RDL**		**Added**		**% R**	**Limits % R**
7439-97-6	Mercury	0.000070U	0.000070		0.0050	0.0051	103	88 - 111

Inorganics Quality Control Summary

Analytical Batch	520243	**Client ID**	MB519605	LCS519605
Prep Batch	519605	**GCAL ID**	1254633	1254634
Prep Method	EPA 3005	**Sample Type**	Method Blank	LCS
	Dissolved	**Prep Date**	11/08/2013 16:15	11/08/2013 16:15
		Analytical Date	11/15/2013 16:55	11/18/2013 17:19
		Matrix	Water	Water

EPA 6010C Dissolved		**Units**	mg/L	**Spike**	**Result**		**Control**
		Result	**RDL**	**Added**		**% R**	**Limits % R**
7429-90-5	Aluminum	0.050U	0.050	5.00	5.12	102	80 - 120
7440-36-0	Antimony	0.015U	0.015	0.50	0.48	96	80 - 120
7440-38-2	Arsenic	0.0057J	0.0050	0.50	0.54	108	80 - 120
7440-39-3	Barium	0.0025U	0.0025	0.50	0.51	102	80 - 120
7440-41-7	Beryllium	0.0010U	0.0010	0.50	0.50	100	80 - 120
7440-43-9	Cadmium	0.0013U	0.0013	0.50	0.53	107	80 - 120
7440-70-2	Calcium	0.20U	0.20	5.00	5.08	102	80 - 120
7440-47-3	Chromium	0.0025U	0.0025	0.50	0.51	102	80 - 120
7440-48-4	Cobalt	0.0025U	0.0025	0.50	0.51	102	80 - 120
7440-50-8	Copper	0.0050U	0.0050	0.50	0.48	96	80 - 120
7439-89-6	Iron	0.050U	0.050	5.00	5.13	103	80 - 120
7439-92-1	Lead	0.0038U	0.0038	0.50	0.53	106	80 - 120
7439-95-4	Magnesium	0.050U	0.050	5.00	5.27	105	80 - 120
7439-96-5	Manganese	0.0038U	0.0038	0.50	0.51	102	80 - 120
7440-02-0	Nickel	0.010U	0.010	0.50	0.51	102	80 - 120
7440-09-7	Potassium	0.13U	0.13	10.0	10.4	104	80 - 120
7782-49-2	Selenium	0.010U	0.010	0.50	0.55	110	80 - 120
7440-22-4	Silver	0.0025U	0.0025	0.50	0.52	104	80 - 120
7440-23-5	Sodium	1.09	0.25	20.0	19.0	95	80 - 120
7440-28-0	Thallium	0.0050U	0.0050	0.50	0.53	106	80 - 120
7440-62-2	Vanadium	0.0050U	0.0050	0.50	0.49	99	80 - 120
7440-66-6	Zinc	0.0050U	0.0050	0.50	0.53	106	80 - 120

Inorganics Quality Control Summary

Analytical Batch	520243	**Client ID**	MW-08-07	1254594MS	1254594MSD
Prep Batch	519605	**GCAL ID**	21311080901	1254635	1254636
Prep Method	EPA 3005	**Sample Type**	SAMPLE	MS	MSD
	Dissolved	**Prep Date**	11/08/2013 16:15	11/08/2013 16:15	11/08/2013 16:15
		Analytical Date	11/18/2013 17:26	11/18/2013 17:33	11/18/2013 17:40
		Matrix	Water	Water	Water

EPA 6010C Dissolved		**Units**	mg/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
7429-90-5	Aluminum	0.0	0.050	5.00	4.85	97	80 - 120	4.92	98	1	20
7440-36-0	Antimony	0.0	0.015	0.50	0.54	108	80 - 120	0.56	111	3	20
7440-38-2	Arsenic	0.040	0.0050	0.50	0.60	112	80 - 120	0.63	118	5	20
7440-39-3	Barium	0.012	0.0025	0.50	0.18	**33***	80 - 120	0.19	**35***	5	20
7440-41-7	Beryllium	0.0	0.0010	0.50	0.49	99	80 - 120	0.52	103	5	20
7440-43-9	Cadmium	0.0	0.0013	0.50	0.48	96	80 - 120	0.51	101	5	20
7440-70-2	Calcium	575	0.20	5.00	571	**-91***	80 - 120	564	**-219***	1	20
7440-47-3	Chromium	0.028	0.0025	0.50	0.50	94	80 - 120	0.52	98	4	20
7440-48-4	Cobalt	0.0035	0.0025	0.50	0.47	94	80 - 120	0.49	96	3	20
7440-50-8	Copper	0.021	0.0050	0.50	0.52	99	80 - 120	0.54	103	4	20
7439-89-6	Iron	0.067	0.050	5.00	4.99	98	80 - 120	5.12	101	3	20
7439-92-1	Lead	0.0	0.0038	0.50	0.33	**67***	80 - 120	0.34	**68***	3	20
7439-95-4	Magnesium	195	0.050	5.00	193	**-46***	80 - 120	197	**24***	2	20
7439-96-5	Manganese	1.35	0.0038	0.50	1.80	90	80 - 120	1.86	102	3	20
7440-02-0	Nickel	0.0	0.010	0.50	0.45	91	80 - 120	0.47	94	3	20
7440-09-7	Potassium	5.57	0.13	10.0	15.8	102	80 - 120	15.9	104	1	20
7782-49-2	Selenium	0.0	0.010	0.50	0.56	111	80 - 120	0.57	114	3	20
7440-22-4	Silver	0.0	0.0025	0.50	0.049	**10***	80 - 120	0.070	**14***	**36***	20
7440-23-5	Sodium	440	0.25	20.0	455	**74***	80 - 120	458	88	1	20
7440-28-0	Thallium	0.014	0.0050	0.50	0.49	95	80 - 120	0.50	97	3	20
7440-62-2	Vanadium	0.039	0.0050	0.50	0.53	99	80 - 120	0.56	104	4	20
7440-66-6	Zinc	0.0	0.0050	0.50	0.52	104	80 - 120	0.55	109	5	20

General Chemistry Quality Control Summary

Analytical Batch 519691	**Client ID**	MB519691			LCS519691		
Prep Batch N/A	**GCAL ID**	1255152			1255153		
	Sample Type	Method Blank			LCS		
	Analytical Date	11/09/2013 13:51			11/09/2013 13:51		
	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	991	99	90 - 110

Analytical Batch 519691	**Client ID**	MRAA-07M		1254933DUP		
Prep Batch N/A	**GCAL ID**	21311085305		1255155		
	Sample Type	SAMPLE		DUP		
	Analytical Date	11/09/2013 13:51		11/09/2013 13:51		
	Matrix	Water		Water		
SM 2540 C-2011		**Units**	mg/L	**Result**		**RPD**
		Result	**RDL**		**RPD**	**Limit**
WET-035	Total Dissolved Solids(TDS)	1660	4.39	1650	1	5

Analytical Batch 519786	**Client ID**	MB519786			LCS519786		
Prep Batch N/A	**GCAL ID**	1255572			1255573		
	Sample Type	Method Blank			LCS		
	Analytical Date	11/11/2013 17:18			11/11/2013 17:18		
	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	958	96	90 - 110

Analytical Batch 519786	**Client ID**	SD08-MW13		1253280DUP		
Prep Batch N/A	**GCAL ID**	21311061102		1255574		
	Sample Type	SAMPLE		DUP		
	Analytical Date	11/11/2013 17:18		11/11/2013 17:18		
	Matrix	Water		Water		
SM 2540 C-2011		**Units**	mg/L	**Result**		**RPD**
		Result	**RDL**		**RPD**	**Limit**
WET-035	Total Dissolved Solids(TDS)	33500	43.9	33600	0	5

General Chemistry Quality Control Summary

Analytical Batch 520062	**Client ID**	MB520062			LCS520062		
Prep Batch N/A	**GCAL ID**	1256721			1256722		
	Sample Type	Method Blank			LCS		
	Analytical Date	11/14/2013 17:19			11/14/2013 17:19		
	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	937	94	90 - 110

Analytical Batch 520062	**Client ID**	MW-08-01A		1254598DUP		
Prep Batch N/A	**GCAL ID**	21311080905		1256723		
	Sample Type	FLDDUP		DUP		
	Analytical Date	11/14/2013 17:19		11/14/2013 17:19		
	Matrix	Water		Water		
SM 2540 C-2011		**Units**	mg/L	**Result**		**RPD**
		Result	**RDL**		**RPD**	**Limit**
WET-035	Total Dissolved Solids(TDS)	5610	4.39	5620	0	5

General Chemistry Quality Control Summary

Analytical Batch 519612	**Client ID**	MB519612			LCS519612		
Prep Batch N/A	**GCAL ID**	1254694			1254695		
	Sample Type	Method Blank			LCS		
	Analytical Date	11/08/2013 12:06			11/08/2013 12:23		
	Matrix	Water			Water		
EPA 300.0		**Units**	mg/L	**Spike**	**Result**		**Control**
		Result	**RDL**	**Added**		**% R**	**Limits % R**
14797-55-8	Nitrate	0.050U	0.050	2.50	2.49	100	80 - 120

Analytical Batch 519612	**Client ID**	MW-08-07			1254594MS			1254594MSD			
Prep Batch N/A	**GCAL ID**	21311080901			1254696			1254697			
	Sample Type	SAMPLE			MS			MSD			
	Analytical Date	11/08/2013 12:40			11/08/2013 12:58			11/08/2013 13:15			
	Matrix	Water			Water			Water			
EPA 300.0		**Units**	mg/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
14797-55-8	Nitrate	1.49	0.250	12.5	13.9	99	80 - 120	14.2	102	2	15

NATIONVIEW

Page: 1 of 1

NV Project No: 10-0004

COC Number(1): 11072013-1

LIMS Number:

Chain of Custody and Analytical Request

Facility/Base I.D.: Holloman Air Force Base, New Mexico

Project/Site Name: SD-08 Quarterly Groundwater Sampling (Q8)

Client Name: USACE Omaha District

Collected by: Tony Lucero / Brian Parrish

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)	Number of containers	VOCs (8260B)	TAL Metals [Dissolved] (6010B/7470A)	Mercury [Total] (6010B/7470A)	TDS (SM19 2540C)	Nitrate (300/9056)				Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
								Sample Analysis Requested (5)									Quality Assurance Samples (6)			
MW-08-07	MW-08-07	06112013	1335	-	N	1	WG	7	Ξ	Ξ	Ξ	Ξ	Ξ							1
MW-08-02	MW-08-02	06112013	1435	-	N	1	WG	7	Ξ	Ξ	Ξ	Ξ	Ξ							2
MW-08-03	MW-08-03	07112013	0855	-	N	1	WG	7	Ξ	Ξ	Ξ	Ξ	Ξ							3
MW-08-01	MW-08-01	07112013	0955		N	1	WG	7	Ξ	Ξ	Ξ	Ξ	Ξ							4
MW-08-01A	MW-08-01A	07112013	0955		FD	1	WG	7	Ξ	Ξ	Ξ	Ξ	Ξ							5
Trip Blank	FIELD QC			-	TB		AQ	1	Ξ											6

Client ID: 4771 - NationView LLC

SDG: 213110809

Due Date: 11/19/13

COMMENTS: Dissolved TAL Metals filtered in the field

Email Results to: tlucero@nationview.net, jhymer@nationview.net.

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. Tony Lucero	11072013	1600	1.		
2. Fed Ex	11/8/13	0945	2.	11/8/13	0945
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:		Shipped No.:	1.1E24
Method of Shipment:	Fed Ex	Airbill Number:	797107740413
Analytical Lab:	GCAL	Delivery Location:	Baton Rogue, LA
Lab Recipient:		Delivery Date/Time:	

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)

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 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, 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 Analysis Requested: Analytical method requested and number of containers provided for each.

6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

7971-0774-3413

GCAL ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIVING CHECKLIST

213110809

SAMPLE DELIVERY GROUP 213110809

Client 4771 - NationView LLC	**Transport Method** FEDEX
Profile Number 204817	**Received By** Saucier, Charlotte
Line Item(s) 3 - SD-08	**Receive Date(s)** 11/08/13

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)
7971 0774 0413		1.1

DISCREPANCIES

None

LAB PRESERVATIONS

None

NOTES

APPENDIX E

Data Validation Reports

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Data Validation Report

This report contains the results of the review and validation of the specified data package performed by Marcia Olive, Bhate Environmental Associates, Denver, Colorado.

Introduction

This data validation report covers samples taken from Holloman Air Force Base, New Mexico, on November 4-7, 2013. Sixteen aqueous samples, two field duplicates and associated QC samples were taken from site SD08 and surroundings for long term monitoring and to delineate the plume adjacent to site SD08. All analyses were performed by Gulf Coast Analytical, Inc., Baton Rouge, LA. The specific samples included in this validation were:

Sample ID	Matrix	Lab Package	Collection Date	Analyses
MW-08-01	Water	213110809	11/7/13	VOCs (SW8260B), Nitrate (EPA 300), Dissolved TAL Metals (SW6010B), Total Mercury (SW7470A), TDS (SM2540C)
MW-08-01A				
MW-08-02			11/6/13	
MW-08-03			11/7/13	
MW-08-04		213110611	11/5/13	
MW-08-05				
MW-08-06				
MW-08-07		213110809	11/6/13	
MW-08-08		213110709		
SWMU183-MW03		213110709	11/5/13	
S10-MW01		213110611		
S10-MW02		213110709	11/6/13	
S10-MW6		213110611	11/4/13	
SD08-MW10		213110709	11/6/13	
SD08-MW11				
SD08-MW12		213110611	11/4/13	
SD08-MW13				
SD08-MW13A				

This data was validated against the laboratory's QA/QC limits using the guidelines and practices published in the *USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review* (USEPA, June 2008), the *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review* (USEPA, January 2010).

Sample Handling and Holding times

The samples were properly preserved and transferred under chain-of-custody to the laboratory for analysis and analyzed within the required holding times with the following exception.

The nitrate analysis of samples S10-MW6, SD08-MW13, SD08-MW13A, SD08-MW12 and SWMU183-MW03 were analyzed outside the requisite 48 hours and qualified estimated, "J".

Blanks

The trip blanks associated with all samples reported low level detections of methylene chloride. This compound was not detected in the associated samples and required on qualification.

The method blanks, associated with lab package 213110611, yielded a detection of sodium. Since any positive result was reported well above the blank concentration the samples were not affected by blank contamination and required no qualification.

The method blank, associated with package 213110709, yielded a low level detection of manganese. Like sodium above, the reported sample results were well above the blank concentration and required no qualification.

The method blank, associated with package 213110809, yielded detections of arsenic and silver. Samples MW-08-02, MW-08-03 and MW-08-01A required qualification (see table below).

Blank spike sample (laboratory control sample-LCS)/surrogate

The LCS and/or LCS duplicate recoveries for bromochloromethane and MTBE (lab package 213110611) were above QC limits. These compounds were not detected in any associated sample and required no qualification

Matrix spike/matrix spike duplicates (MS/MSD)

For lab package 213110611, the MS/MSD recoveries and/or relative percent difference (RPD) for acetone, bromochloromethane, naphthalene, MTBE, trans-1,4-dichloro-2-butene, cis-1,2-dichloroethene, dissolved and total mercury, arsenic, barium, calcium, lead, magnesium, silver, sodium and zinc were outside control limits. Precision and accuracy were cross reference with the LCS recoveries; which were either within control limits or the compound was not detected in the samples. Therefore, no compound warranted qualification based on matrix spike discrepancies.

The lab package 213110709 yielded MS/MSD recoveries and/or RPDs for antimony, barium, calcium, lead, manganese, selenium, silver, thallium, sodium and magnesium outside QC limits. Control limits were not applicable for sodium and magnesium since the target analyte concentration exceeded the spiked concentration by a factor of four or more. Finally, lab package 213110809 yielded the MS/MSD recovery and/or RPD for barium, calcium, lead, magnesium, silver and sodium outside control limits. Control limits were not applicable for calcium, sodium and magnesium since the target analyte concentration exceeded the spiked concentration by a factor of four or more. Precision and accuracy were cross reference with the LCS recoveries; which were within control limits. Therefore, no compound required qualification.

Project specific quality assurance/quality control

The relative percent difference (RPD) between sample MW-08-01 and its field duplicate was outside control limits for 1,2-dichloroethane, benzene and ethylbenzene. These compounds were qualified as estimated, “J”.

Compound quantitation and reporting limits

Where a dilution was required, due to either matrix interference or to quantify the data, elevated reporting limits were reported.

Overall assessment of data

All analyses were performed, and the data met the required QC criteria except where noted. The data is 100% complete.

For lab package 213110611, the continuing calibration verification percent drift (%D) for trichlorofluoromethane was above QC limits. This compound was not detected in any associated sample and required no qualification.

Summary of Qualified Data

Sample ID	Parameter	Qualifier*/Reason
S10-MW6	Nitrate	43.2 J
SD08-MW13	Nitrate	12.9 J
SD08-MW13A	Nitrate	11.9 J
SD08-MW12	Nitrate	21.7 J
SWMU183-MW03	Nitrate	23.0 J
MW-08-01	1,2-Dichloroethane Benzene Ethylbenzene	26.1 J 1.25 J 0.785 J
MW-08-01A	1,2-Dichloroethane Benzene Ethylbenzene Silver	42.2 J 0.534 J 0.276 J 0.043 J
MW-08-02	Arsenic	0.014 J
MW-08-03	Silver	0.030 J

*volatiles in µg/L/metals in mg/l

APPENDIX F

Daily Quality Control Reports

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DAILY QUALITY CONTROL REPORT

Project Number/Name: 10-0004 GW Monitoring and Sampling at Multiple Sites DQCR No.: 000

Date: 11/04/2013 Time On-Site: 6:30 AM Time Off-Site: 16:30 PM

Site Name: SD-08 Weather: Clear/Sunny Temperature: 45 – 74

Contractor Personnel On-Site: NV; Brian Parrish, Tony Lucero

Visitors On-Site: None

Summary of Work Performed: 0630-0730 Gathered supplies/materials. 0800-1000 Gathered initial well levels on all associated wells. (vehicle odometer 18,911). 1000-1050 Returned to Bldg 1266 for YSI (Tony purchased and installed new batteries this morning). Turned in water level readings. Calibrated the YSI. 1050-1130 Organized and set up equipment. 1130-1245 Sampled S10 MW-06. 1245-1400 sampled SD08-MW13 and 13a. 1400-1530 sampled SD08-MW12. 1530-1630 returned to Bldg 1266 with samples. Dropped off materials and supplies. Generated paper work. (vehicle odometer 18942). Tony packed and shipped samples.

Level of Health & Safety Protection: Modified Level D (Safety Shoes, Eye Protection, Nitrile Gloves and appropriate clothing as required).

Equipment Used: YSI 650 MDS, LaMotte 2020 turbidity meter

Calibration(s) Performed: YSI- PH, Conductivity, ORP

Equipment Problem(s)/Remedies: None

Samples Collected* Listed above

Sample Collection Method(s): Geo-Pump, ¼ inch Polyethylene tubing

Quality Control: Duplicate Sample, MS, MSD

Proposed Schedule for Tomorrow: Continue well samples.

Additional Remarks:

Signature: John Hymer **Job Title:** Site Manger

*Indicates sample media: groundwater, surface water, soil or sediment; sample type: composite, grab, split, duplicate, rinsate, and sample I.D. numbers

DAILY QUALITY CONTROL REPORT

Project Number/Name: 10-0004 GW Monitoring and Sampling at Multiple Sites DQCR No.: 000

Date: 11/05/2013 Time On-Site: 6:30 AM Time Off-Site: 16:30 PM

Site Name: SD-08 Weather: Mostly Cloudy Temperature: 51 – 63

Contractor Personnel On-Site: NV; Brian Parrish, Tony Lucero

Visitors On-Site: None

Summary of Work Performed: 0630-0730 Gathered supplies/materials. 0730-0845 Sampled MW-08-06 to include MS/MSD. 0845-0915 Returned to Bldg 1266 for trash bags and additional tubing. 0915-1005 Sampled MW-08-05. 1005-1105 Sampled S10-MW01. 1220-1345 Delivered samples to Bldg 1266 for shipping (Tony Lucero packed and shipped). Filtered bottles for dissolved metals and picked up additional bottle sets. 1345-1500 Sampled SWMU183-MW03. 1500-1640 Returned to Bldg 1266. Delivered samples for shipping, dropped off materials/supplies/equipment, and generated daily report.

Level of Health & Safety Protection: Modified Level D (Safety Shoes, Eye Protection, Nitrile Gloves and appropriate clothing as required).

Equipment Used: YSI 650 MDS, LaMotte 2020 turbidity meter

Calibration(s) Performed: YSI- PH, Conductivity, ORP

Equipment Problem(s)/Remedies: None

Samples Collected* Listed above

Sample Collection Method(s): Geo-Pump, ¼ inch Polyethylene tubing

Quality Control: Duplicate Sample, MS, MSD

Proposed Schedule for Tomorrow: Continue well samples.

Additional Remarks:

Signature: John Hymer **Job Title:** Site Manger

*Indicates sample media: groundwater, surface water, soil or sediment; sample type: composite, grab, split, duplicate, rinsate, and sample I.D. numbers

DAILY QUALITY CONTROL REPORT

Project Number/Name: 10-0004 GW Monitoring and Sampling at Multiple Sites DQCR No.: 000

Date: 11/06/2013 Time On-Site: 6:30 AM Time Off-Site: 16:30 PM

Site Name: SD-08 Weather: Clear and Sunny Temperature: 30 – 65

Contractor Personnel On-Site: NV; Brian Parrish, Tony Lucero

Visitors On-Site: None

Summary of Work Performed: 0630-0730 Gathered supplies/materials. Equipment calibration. 0730-0850 Sampled S10-MW02. 0850-1000 Sampled SD08-MW11. 1000-1100 Sampled SD08-MW10. 1100-1215 Sampled MW-08-08. 1215-1300 Delivered samples to Bldg 1266 for shipping. Tony Lucero packed and shipped. 1300-1405 Sampled MW08-07. 1405-1515 Sampled MW08-02. 1515-1630 Returned to Bldg 1266 and stored samples. Unloaded materials/supplies/equipment and completed daily paperwork.

Level of Health & Safety Protection: Modified Level D (Safety Shoes, Eye Protection, Nitrile Gloves and appropriate clothing as required).

Equipment Used: YSI 650 MDS, LaMotte 2020 turbidity meter

Calibration(s) Performed: YSI- PH, Conductivity, ORP

Equipment Problem(s)/Remedies: None

Samples Collected* Listed above

Sample Collection Method(s): Geo-Pump, ¼ inch Polyethylene tubing

Quality Control: Duplicate Sample, MS, MSD, none taken today.

Proposed Schedule for Tomorrow: Continue well samples.

Additional Remarks:

Signature: John Hymer **Job Title:** Site Manger

*Indicates sample media: groundwater, surface water, soil or sediment; sample type: composite, grab, split, duplicate, rinsate, and sample I.D. numbers

DAILY QUALITY CONTROL REPORT

Project Number/Name: 10-0004 GW Monitoring and Sampling at Multiple Sites DQCR No.: 000

Date: 11/07/2013 Time On-Site: 6:30 AM Time Off-Site: 12:30 PM

Site Name: SD-08 Weather: Clear and Sunny Temperature: 29 – 66

Contractor Personnel On-Site: NV; Brian Parrish, Tony Lucero

Visitors On-Site: None

Summary of Work Performed: 0630-0800 Gathered supplies, materials, and equipment. 0800-0910 sampled MW-08-03. 0910-1030 Sampled MW-08-01 to include Duplicate

1030-1230 delivered samples for shipping to Building 1266 and completed daily paper work.

Level of Health & Safety Protection: Modified Level D (Safety Shoes, Eye Protection, Nitrile Gloves and appropriate clothing as required).

Equipment Used: YSI 650 MDS, LaMotte 2020 turbidity meter

Calibration(s) Performed: YSI- PH, Conductivity, ORP

Equipment Problem(s)/Remedies: None

Samples Collected* Duplicate at MW-08-01

Sample Collection Method(s): Geo-Pump, ¼ inch Polyethylene tubing

Quality Control: Duplicate Sample, MS, MSD, none taken today.

Proposed Schedule for Tomorrow: Continue well samples.

Additional Remarks:

Signature: John Hymer **Job Title:** Site Manger

*Indicates sample media: groundwater, surface water, soil or sediment; sample type: composite, grab, split, duplicate, rinsate, and sample I.D. numbers