



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 49TH WING (ACC)
HOLLOMAN AIR FORCE BASE, NEW MEXICO



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10-16-2013 A11:07

New Mexico Environment Department
Attn: Mr. John Kieling, Chief
Hazardous Waste Bureau
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Santa Fe NM

Dear Mr. Kieling

Holloman Air Force Base is pleased to submit the Final SD-08 Long Term Monitoring Report, Quarter 7, Summer 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 at at (575) 572-3931 or by e-mail at deanna.rothhaupt@holloman.af.mil.

Sincerely

DEANNA ROTHHAUPT, GS-12, DAF

Attachment:
Final SD-08 Long Term Monitoring Report, Quarter 7, Summer 2013

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October 1, 2013

Holloman Air Force Base
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Attention: Ms. DeAnna M. Rothhaupt

Subject: **SD-08 Long Term Monitoring (LTM) Quarterly Report**
49 CES/CEAN
Holloman Air Force Base, New Mexico
Contract No. W9128F-09-D-0055, Delivery Order 003



Dear Ms. Rothhaupt,

NationView LLC is pleased to submit this Long Term Monitoring Report, Quarter 7, Summer 2013, Holloman Air Force Base, New Mexico. This report discusses background information, screening criteria, field activities, analytical results, comparisons to previous SD-08 LTM results, conclusions, and recommendations for the subject property.

Our services were provided in general accordance with contract W9128F-09-D-0055, Task Order No. 0003 for the United States Corps of Engineers, Omaha District.

We appreciate your selection of NationView LLC for this project and look forward to assisting you further on other projects. If you have any questions, please do not hesitate to contact Fermin Esquibel at 256-713-9494 or via email at Fesquibel@nationview.net.

Sincerely,

A handwritten signature in black ink that reads 'David D. Martin'.

David D. Martin
President

FINAL
SD-08 LONG TERM MONITORING REPORT
QUARTER 7, SUMMER 2013
HOLLOMAN AIR FORCE BASE, NEW MEXICO

Prepared For:
49 CES/CEAN
Holloman Air Force Base
New Mexico

Under Contract to:



U.S. Army Corps of Engineers
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Contract No. W9128F-09-D-0055
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September 2013

Prepared By



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FINAL
SD-08 LONG TERM MONITORING REPORT
QUARTER 7, SUMMER 2013
HOLLOMAN AIR FORCE BASE, NEW MEXICO

TABLE OF CONTENTS

ACRONYMS iv

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 Soil Screening Criteria 3-1

 3.2 Groundwater Screening Criteria 3-1

4 Summer 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 4-4

 4.6 Documentation 4-4

5 SUMMER 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 SUMMER 2013 Groundwater Sampling Results to Previous SD-08 LTM Results.....	6-1
6.1	Volatile Organic Compounds	6-1
6.2	Metals	6-2
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	New Monitoring Well Locations Map (March 2013)
Figure 4-2	Site SD-08 Potentiometric Map (Summer 2013)
Figure 5-1	Site SD-08 Groundwater Analytical Results Above Action Levels (Summer 2013)
Figure 5-2	Site SD-08 1,2-Dichloroethane Isoconcentration Map (Summer 2013)
Figure 6-1	1,2-Dichloroethane Concentration Trends in SD-08 Monitoring Wells

Tables

Table 4-1	Groundwater Elevation Summary (April 2013)
Table 5-1	Groundwater Analytical Data (Summer 2013)
Table 6-1	Summary of Selected SD-08 Groundwater Analytical Results Above Action Levels (January 2012 – July 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-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
HHMSSL	Human Health Medium Specific Screening Level
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	NationView, 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
PID	photoionization detector
PRG	Preliminary Remediation Goal
PVC	polyvinyl chloride
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
SSL	Soil Screening Level
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

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1 INTRODUCTION

This Long Term Monitoring (LTM) Quarterly Report documents the seventh quarterly (Summer 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 – Summer 2013 Field Activities
- Section 5 – Summer 2013 Analytical Results
- Section 6 – Comparison of the Summer 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 [ft²]). 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 (OWS) near the northwest corner of the washrack. According to site personnel, it was common for the sewer line to clog, causing the sump and OWS 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 ft², 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.*

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 [$\mu\text{g/L}$]), benzene (870 $\mu\text{g/L}$), 1,2-DCA (440 $\mu\text{g/L}$), toluene (90 $\mu\text{g/L}$), and xylenes (560 $\mu\text{g/L}$) 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 seventh quarterly (Summer 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). Soil and 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 seventh quarter sampling event conducted in July 2013.

3.1 Soil Screening Criteria

The risk based action levels for unrestricted land use provided in Appendix A, Table A-1 (NMED Soil Screening Levels [SSLs]), *Risk Assessment Guidance for Site Investigations and Remediation* (NMED, 2012a) are used as the primary action levels for VOCs and target analyte list (TAL) metals. As per the HAFB Permit, Appendix 4-F V.1 (NMED, 2004) if a NMED soil cleanup level has not been established for a particular chemical of potential concern (COPC) (e.g. Calcium) that constituent has been compared to the USEPA Region 6 Human Health Medium Specific Screening Level (HHMSSL). However, under an Interagency Agreement as an update of the United States Environmental Protection Agency's (USEPA) Region 3 Risk-Based Concentration (RBC) Table, Region 6 HHMSSL Table, and the Region 9 Preliminary Remediation Goal (PRG) Table; the Region 6 HHMSSLs have been combined into the Regional Screening Level (RSL) Summary Table (USEPA, 2012). Additionally, all detected TAL metals are compared to their respective NMED approved background levels (NMED, 2011b).

3.2 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 Filtered (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.

4 SUMMER 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). Based on the results of first 6 quarters (January 2012 through May 2013) the NMED in correspondence dated October 5, 2012 (NMED, 2012b) requested soil samples collected from two upgradient locations and approved the installation of four additional monitoring wells (SD08-MW10 through SD08-MW13) to help delineate the upgradient and downgradient extents of the groundwater contamination found at SD-08. The NMED also requested adding cross-gradient monitoring well S10-MW02 to the LTM program at Site SD-08 and approved removing Sulfate, Chloride, and Fluoride anion analysis.

Therefore, in order to accomplish the objectives of the SD-08 LTM program the following field activities were performed by NationView from July through August 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).
- Collected one round of groundwater samples 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). The four monitoring wells (SD08-MW10, SD08-MW11, SD08-MW12, SD08-MW13), installed during the Spring 2013, were added to the LTM program during this quarter.
- 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 July 22 - 31, 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 2-3. 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 seventh quarterly sampling event (Summer 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 (soil and groundwater)
- TAL Metals by USEPA 6010B (soil-total; groundwater-dissolved)
- Total Mercury by USEPA 7470A (soil and 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 S10-MW01 and its field duplicate was outside control limits for 1,2-dichloropropane and trichloroethene. These

samples are qualified estimated (J) in both samples (J is a laboratory data qualifier denoting an estimated result).

4.2.2 TAL Metals

No qualification was required of the Metals data.

4.2.3 Nitrate

No qualification was required of the Nitrate data.

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 survey grade 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 7 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 August 14, 2013. Static water elevations measured from the top of casing ranged from 4074.87 ft above mean sea level (amsl) at monitoring well MW-09-01 to 4072.30 ft amsl at S10-MW06. 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 August 14, 2013 (Figure 4-2). The groundwater flow direction at SD-08 is primarily to the east-southeast towards Dillard's Draw.

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 SUMMER 2013 ANALYTICAL RESULTS

During the Quarter 7 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 July 22nd through July 30th, 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 July 2013, 18 groundwater samples (including two duplicates) were collected from 16 monitoring wells during the Summer 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

Seven VOCs (1,2-DCA, 1,2-DCP, acetone, benzene, chloroform, sec-butylbenzene, and tert-butylbenzene) were detected above the MDL in groundwater samples collected during this sampling event. 1,2-DCA and 1,2-DCP 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 (45.4 µg/L), MW-08-02 (10.8 µg/L), MW-08-07 (39.9 µg/L), SD08-MW11 (80.5 µg/L), and S10-MW01 (12.7 µg/L). 1,2-DCA was also detected in monitoring well MW-08-05 (2.34 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 S10-MW01) and exceeded the USEPA MCL (5 µg/L) in wells MW-08-01 (6.72 µg/L) and SD08-MW11 (5.37 µg/L).

Five additional VOCs were detected at concentrations below applicable groundwater action levels. Benzene was detected in two monitoring wells (MW-08-01 and SD08-MW10) and exceeded the USEPA MCL (5 µg/L) in well SD08-MW10 (58.4 µg/L). Maximum concentrations of acetone (6.72 µg/L), sec-butylbenzene, (0.604 J µg/L), and tert-butylbenzene (0.984 J µg/L) were also detected in MW-08-01 during Quarter 7. The maximum concentration of chloroform (0.784 J µg/L) was detected in MW-08-06. It should be noted that the NMWQCC and USEPA have not established standards for acetone, sec-butylbenzene, and tert-butylbenzene.

5.1.2 Target Analyte List Metals

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

Thirteen 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 three dissolved metals (cobalt, 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 three 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 7.1 µg/L (S10-MW02) to 25 µg/L (MW-08-07). 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 7,110 µg/L (MW-08-01), 900 µg/L (MW-08-02), 1000 µg/L (MW-08-08), and 1000 µg/L (MW-08-02). The maximum iron concentration (7110 µg/L) also exceeds the NMWQCC standard of 1,000 µg/L. In addition, iron was detected above 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 eight monitoring wells above the USEPA Secondary MCL and the NMED approved background level (50 µg/L) with concentrations ranging from 190 µg/L (S10-MW06) to 2,470 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 (2,470 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 thirteen monitoring wells at concentrations ranging from 0.351 J milligrams per liter (mg/L) (MW-08-05) to 46.7 mg/L (S10-MW06). Nitrate concentrations exceeded the USEPA MCL (10 mg/L) in MW-08-03, MW-08-06, MW-08-08, 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 2,950 mg/L (MW-08-05) to 69,700 mg/L (SD08-MW12) in the groundwater samples collected during the seventh quarterly sampling event. All of these TDS concentrations 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 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 SD-08 is not a valid exposure pathway.

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

This section provides a comparison of the Summer 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). Therefore, S10-MW02 will not be included in the following discussion.

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 Summer 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 increased from 27.9 µg/L (April 2013) to 45.4 µg/L (July 2013) and has varied for the last 6 quarters (Figure 6-1). The concentration of 1,2-DCP (6.72 µg/L) has remained relatively consistent since the January 2012 event (6.49 µg/L) and is now slightly over the USEPA MCL (5 µg/L).
- **MW-08-02:** The concentration of 1,2-DCA decreased dramatically from 63.9 µg/L (January 2013) to 10.8 µg/L (July 2013). 1,2-DCA has exceeded the USEPA MCL (5 µg/L) in six of the seven quarterly sampling events (Figure 6-1). 1,2-DCP detected at 1.38 µg/L in January 2013 was not detected in July 2013.
- **MW-08-03:** As of July 2013, all VOC detections have not exceeded applicable action levels.
- **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:** Low estimated concentration of 1,2-DCA (2.34 µg/L) was detected for the first time since the second quarterly sampling event (April 2012). However all other VOCs remain undetected during the seventh quarter sampling event (July 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 April 2013 and was detected in quarter seven at the lowest recorded concentration (39.9 µg/L) since January 2012 (Figure 6-1). 1,2-DCP was detected during this quarter at 1.12 µg/L and has never exceeded the USEPA MCL (5 µg/L).
- **MW-08-08:** No VOCs were detected in this monitoring well in July 2013 or during previous LTM sampling events (Table 6-1).
- **SD08-MW10:** No VOCs were detected above applicable groundwater standards this quarter, the first sampling event for this well (Quarter 7).
- **SD08-MW11:** The concentration of 1,2-DCA was reported as 80.5 µg/L (July 2013). 1,2-DCA exceeded the USEPA MCL (5 µg/L) during the seventh quarterly sampling event (Figure 6-1). 1,2-DCP detected at 5.37 µg/L during the seventh quarter, the first sampling event for this well. The concentration of 1,2-DCP (5.37 µg/L) is slightly over the USEPA MCL (5 µg/L).
- **SD08-MW12:** No VOCs were detected above applicable groundwater standards this quarter, the first sampling event for this well (Quarter 7).
- **SD08-MW13:** No VOCs were detected above applicable groundwater standards this quarter, the first sampling event for this well (Quarter 7).
- **S10-MW01:** Concentrations of 1,2-DCA have remained relatively consistent over the seven 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 detected again in the seventh quarter (July 2013).
- **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 Summer 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 July 2013 and continue to exceed NMWQCC standards. Dissolved arsenic was detected at the highest recorded concentration and now also exceeds the NMWQCC standard. Antimony detected above the USEPA MCL (6 µg/L) during the fourth and fifth quarters was not detected during the sixth and seventh quarters. Dissolved iron was detected at MW-08-01 for the again in July 2013 above the USEPA secondary MCL (300 µg/L). All other dissolved TAL metal concentrations have remained relatively constant and were detected below NMWQCC standards and USEPA MCLs.
- **MW-08-02:** Concentrations of iron and manganese continue to exceed applicable USEPA Primary and Secondary MCLs but have decreased significantly during the seventh quarter. Dissolved thallium detected above the USEPA MCL (2 µg/L) during the October 2012 sampling event and the April 2013, was not detected during the July 2103 sampling event. Dissolved iron was again detected at MW-08-02 above the USEPA secondary MCL (300 µg/L). 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 seventh quarter. All other total TAL metals remained below applicable NMWQCC and USEPA action levels.
- **MW-08-04:** Dissolved arsenic which was detected for the first time in the third quarter (July 2012) and again in the sixth quarter (April 2013), was not detected during the seventh quarter. Manganese and iron remain undetected at MW-08-04. Thallium and aluminum which had previously exceeded applicable action levels were not detected during the seventh 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 July 2013. Dissolved iron continues to be undetected at MW-08-05. However, dissolved manganese increased to 58.4 µg/L during the seventh quarter and exceeded the USEPA secondary MCL (50 µg/L) for the third consecutive quarter in July 2013. Dissolved antimony is the only other TAL metal historically detected above the USEPA MCL (6 µg/L) was not detected in July 2013.
- **MW-08-06:** Concentrations of dissolved arsenic were non-detect during the seventh quarter (July 2013). Dissolved iron and manganese continue to be undetected at MW-08-06. Dissolved thallium, detected for the first time during

the fourth quarter, did not exceed the USEPA MCL (2 µg/L) during the seventh quarter.

- **MW-08-07:** Concentrations of dissolved arsenic remains relatively consistent with the previous quarters during the seventh quarter (July 2013). Dissolved iron continues to be undetected, while the dissolved manganese concentration (1,160 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 seventh quarter (July 2013).
- **MW-08-08:** Dissolved arsenic which had increased to the highest recorded concentration during the fourth quarter (October 2012), was not detected in July 2013 (Quarter 7). Dissolved iron also continues to be undetected, while dissolved manganese increased in quarter seven (95 µg/L) and exceeded the USEPA secondary MCL (50 µg/L). Antimony is the only other TAL metal previously detected above a USEPA MCL that was not detected during the seventh quarter (July 2013).
- **SD08-MW10:** Dissolved arsenic which was detected during the seventh quarter (July 2013), the first sampling event associated with this well. Manganese was also detected at 2,130 µg/L and exceeds the USEPA secondary MCL (50 µg/L) and NMWQCC standard (1,000 µg/L). All other dissolved metals remained below their applicable NMWQCC and USEPA action levels.
- **SD08-MW11:** Manganese was detected at 2,570 µg/L and exceeds the USEPA secondary MCL (50 µg/L) and NMWQCC standard (1,000 µg/L). All other dissolved metals remained below their applicable NMWQCC and USEPA action levels.
- **SD08-MW12:** Dissolved arsenic which was detected during the seventh quarter (July 2013) at 64 J µg/, the first sampling event associated with this well. Manganese was also detected at 69 J µg/L and exceeds the USEPA secondary MCL (50 µg/L). 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.
- **S10-MW01:** Dissolved arsenic was not detected during the seventh quarter (July 2013). Concentrations of dissolved manganese remains constant above the NMWQCC standard and dissolved iron remains not detected, during the seventh quarterly event. Thallium is the only other TAL metal detected above the USEPA MCLs but went undetected during the seventh quarter. Antimony was

detected for the first time during the fourth quarterly sampling event (October 2012) but went undetected during the seventh quarter.

- **S10-MW02:** Dissolved arsenic decreased from 0.016 J $\mu\text{g/L}$ in April 2013 to 0.0071 J $\mu\text{g/L}$ in July 2013. All other dissolved metals remained below their applicable NMWQCC and USEPA action levels.
- **S10-MW06:** Dissolved arsenic increased to a historical high concentration in the seventh quarter (July 2013). Dissolved iron continues to be undetected, and dissolved manganese increased from the previous quarter (April 2013). Antimony is the only other metal previously detected above the USEPA MCL. Antimony was not detected in the seventh quarter.
- **SWMU183-MW03:** Dissolved arsenic increased to a historical high concentration in the seventh quarter (July 2013). Concentrations of dissolved manganese remain constant above the NMWQCC standard and dissolved iron remains not detected, during the seventh quarterly sampling event. Antimony was detected for the first time in October 2012 was not detected in the seventh quarter (July 2013).

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 seventh quarterly sampling event (Summer 2013) were evaluated and compared with the results of the previous quarterly sampling events (January, April, July, October 2012, January 2013, and April 2013). Based on the results of the first six quarterly sampling events the following actions were implemented during the seventh quarterly sampling event (Summer 2013):

- 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.
- 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 increase in 1,2-DCA and 1,2-DCP concentrations during the seventh quarterly SD-08 groundwater sampling event compared with the sixth quarterly event (Table 6-1). The following paragraphs summarize the detection and distribution of pertinent COCs and discuss subsequent recommendations.

During the seventh quarter sampling event (July 2014), 1,2-DCA exceeded the USEPA MCL (5 µg/L) in five of the Site SD-08 monitoring wells (MW-08-01, MW-08-02, 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, remained constant in wells S10-MW01 and MW-08-02, increased in monitoring well MW-08-01, and was first observed in the seventh quarter in SD08-MW11. The decreasing 1,2-DCA concentration trend in MW-08-07 (upgradient well) and increasing 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 five monitoring wells exhibit a southeasterly migration of 1,2-DCA across the SD-08 Site. The five 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 flow is from the west to east at SD-08 (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).

Presented below are the recommendations to further delineate the nature and extent of 1,2-DCA groundwater contamination currently present at SD-08:

- Sampling will 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 upgradient and cross gradient monitoring wells SWMU183-MW03, MW-08-04, MW-08-06, MW-08-08, SD08-MW10 and 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, SD10-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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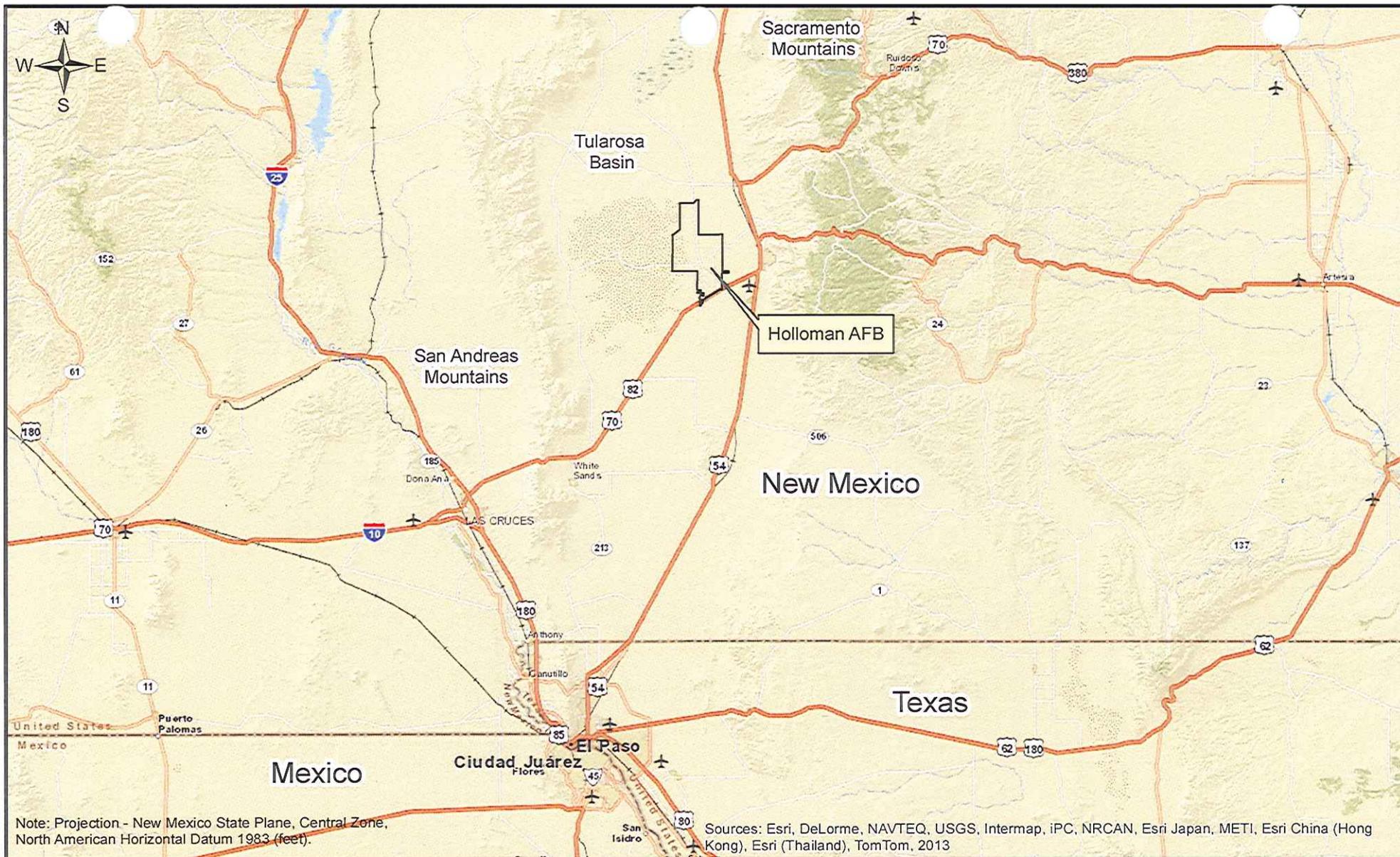
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FIGURES

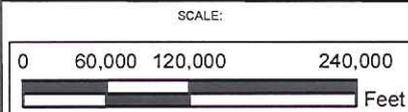


Holloman Air Force Base
New Mexico
Location Map

SD-08
Long Term Monitoring Report
Quarter 7, Summer 2013
Holloman Air Force Base, New Mexico



PROJECT NO:
10-0004



DATE:
9/15/13

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Figure 2-1

Figure 2-1



SD-08 Site Location Map

SD-08
Long Term Monitoring Report
Quarter 7, Summer 2013
Holloman Air Force Base, New Mexico

Figure 2-2

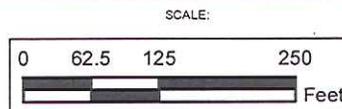
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SD-08 Site Plan Map

SD-08
Long Term Monitoring Report
Quarter 7, Summer 2013
Holloman Air Force Base, New Mexico
Figure 2-3

PROJECT NO:
10-0004



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9/15/13

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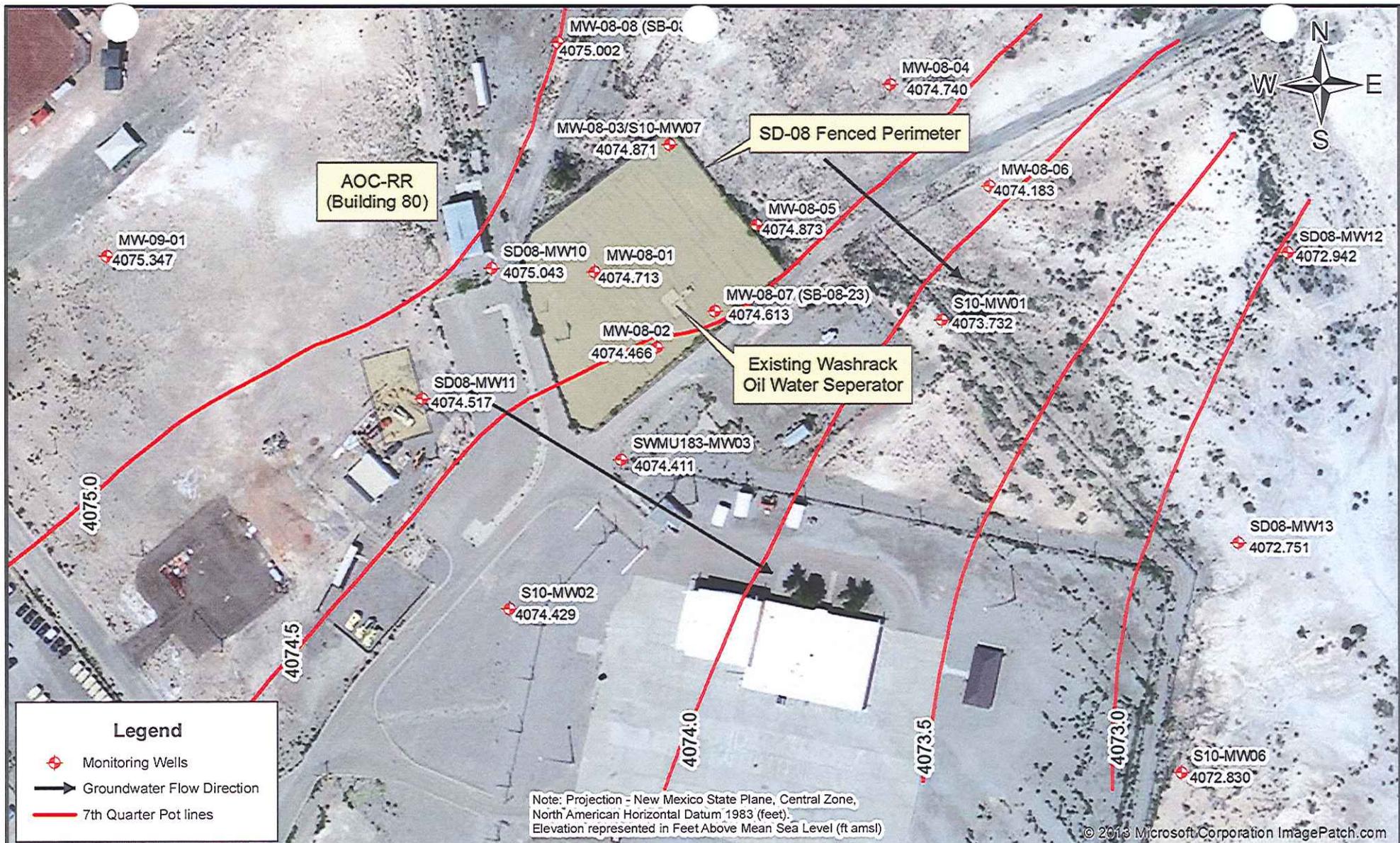


New Monitoring Well Location Map

SD-08
 Long Term Monitoring Report
 Quarter 7, Summer 2013
 Holloman Air Force Base, New Mexico
 Figure 4-1



PROJECT NO: 10-0004	SCALE: 0 62.5 125 250 Feet	DATE: 9/15/13	DRAWN BY: FRE
			DRAWING NO: Figure 4-1



Site SD-08 Potentiometric Map (August 2013)

SD-08
Long Term Monitoring Report
Quarter 7, Summer 2013
Holloman Air Force Base, New Mexico

Figure 4-2



PROJECT NO: 10-0004	SCALE: 0 62.5 125 250 Feet	DATE: 9/15/13	DRAWN BY: FRE DRAWING NO: Figure 4-2
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MW-08-08		
Parameter	Result (mg/L)	Action Level (mg/L)
Manganese	0.095	0.050 ²
Nitrate	15.9 J	10 ³
TDS	39,500	500 ²

SD08-MW10		
Parameter	Result (mg/L)	Action Level (mg/L)
Arsenic	0.043	0.010 ¹
Manganese	2.13	0.050 ²
TDS	4,210	500 ²

SD08-MW11		
Parameter	Result (µg/L)	Action Level (µg/L)
1,2-Dichloroethane	80.5	5 ¹
1,2-Dichloropropane	5.37	5 ¹
Parameter	Result (mg/L)	Action Level (mg/L)
Manganese	2.57	0.050 ²
TDS	24,000	500 ²

MW-08-01		
Parameter	Result (µg/L)	Action Level (µg/L)
1,2-Dichloroethane	45.4	5 ¹
1,2-Dichloropropane	6.72	5 ¹
Parameter	Result (mg/L)	Action Level (mg/L)
Arsenic	ND	0.010 ¹
Iron	7.11	0.300 ²
Manganese	2.47	0.050 ²
TDS	9,100	500 ²

MW-08-02		
Parameter	Result (µg/L)	Action Level (µg/L)
1,2-Dichloroethane	10.8	5 ¹
Parameter	Result (mg/L)	Action Level (mg/L)
Arsenic	ND	0.010 ¹
Iron	0.9	0.300 ²
Manganese	3.78	0.050 ²
TDS	3,710	500 ²

S10-MW02		
Parameter	Result (mg/L)	Action Level (mg/L)
Arsenic	0.007 J	0.010 ¹
Nitrate	10.7	10 ³
TDS	3,760	500 ²

SWMU183-MW03		
Parameter	Result (mg/L)	Action Level (mg/L)
Manganese	1.13	0.050 ²
Nitrate	24.2	10 ³
TDS	6,430	500 ²

S10-MW01 / S10-MW01A		
Parameter	Result (µg/L)	Action Level (µg/L)
1,2-Dichloroethane	12.7 / 12.4	0.005 ³
Parameter	Result (mg/L)	Action Level (mg/L)
Manganese	0.16 / 0.16	0.050 ²
TDS	13,700 / 13,100	500 ²

MW-08-03		
Parameter	Result (mg/L)	Action Level (mg/L)
Nitrate	10.8	10 ³
TDS	11,700	500 ²

MW-08-04		
Parameter	Result (mg/L)	Action Level (mg/L)
Manganese	0.292	0.010 ¹
TDS	5,590	500 ²

MW-08-06		
Parameter	Result (mg/L)	Action Level (mg/L)
Nitrate	13.2 J	10 ³
TDS	25,300	500 ²

SD08-MW12		
Parameter	Result (mg/L)	Action Level (mg/L)
Arsenic	0.064 J	0.010 ¹
Manganese	0.069 J	0.050 ²
TDS	69,700	500 ²

MW-08-05		
Parameter	Result (mg/L)	Action Level (mg/L)
Manganese	0.016	0.050 ²
Nitrate	0.351 J	10 ³
TDS	2,950	500 ²

MW-08-07		
Parameter	Result (µg/L)	Action Level (µg/L)
1,2-Dichloroethane	39.9	0.005 ³
1,2-Dichloropropane	1.12 J	5 ¹
Parameter	Result (mg/L)	Action Level (mg/L)
Arsenic	0.025	0.010 ¹
Manganese	1.16	0.050 ²
Nitrate	1.69 J	10 ³
TDS	4,180	500 ²

SD08-MW13		
Parameter	Result (mg/L)	Action Level (mg/L)
TDS	39,800	500 ²

S10-MW06 / S10-MW06A		
Parameter	Result (mg/L)	Action Level (mg/L)
Manganese	0.19 / 0.14	0.050 ²
Nitrate	46.7 / 45.7	10 ³
TDS	15,000 / 15,200	500 ²

Legend

Monitoring Wells

Note: Projection - New Mexico State Plane, Central Zone, North American Horizontal Datum 1983 (feet). Elevation represented in Feet Above Mean Sea Level (ft amsl). State of Michigan © AND

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

SD-08
Long Term Monitoring Report
Quarter 7, Summer 2013
Holloman Air Force Base, New Mexico



PROJECT NO: 10-0004

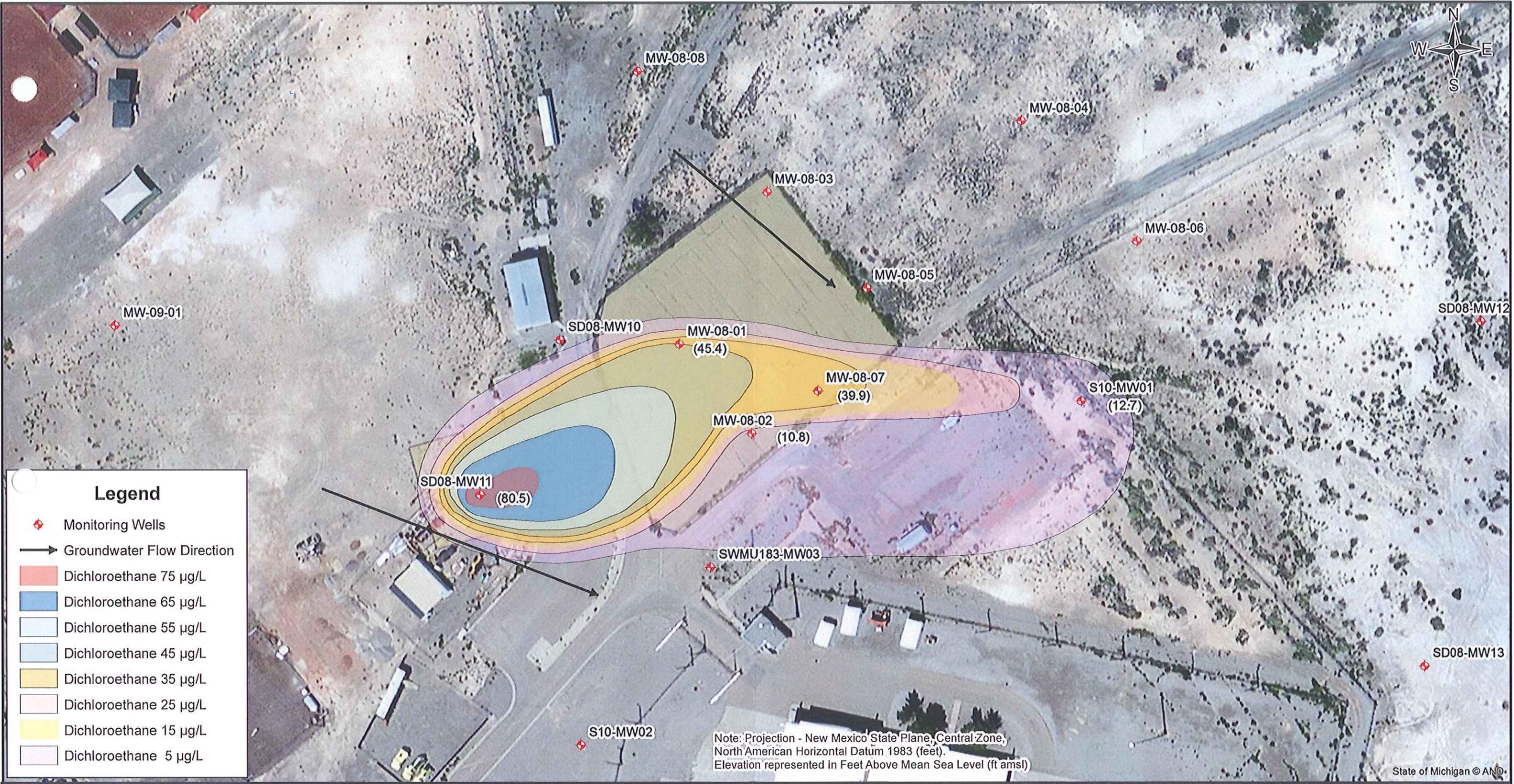
SCALE: 0 125 250 500 Feet

DATE: 9/15/13

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DRAWING NO: Figure 5-1

Figure 5-1



Site SD-08
1, 2-Dichloroethane Isocountour Map (August 2013)

SD-08
 Long Term Monitoring Report
 Quarter 7, Summer 2013
 Holloman Air Force Base, New Mexico

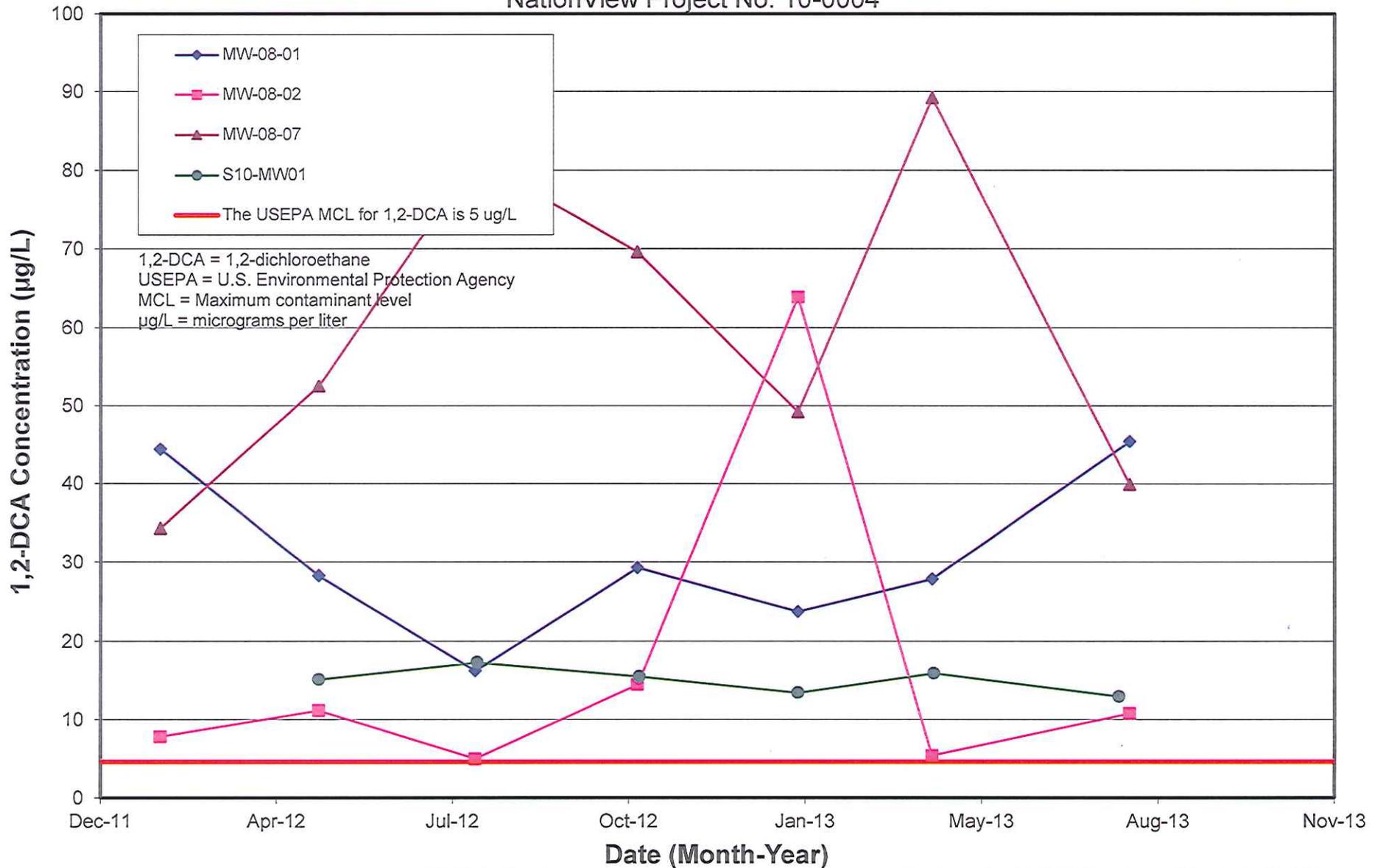
Figure 5-2



PROJECT NO:	SCALE:
10-0004	0 80 160 320 Feet

DATE:	DRAWN BY:
9/15/13	FRE
	DRAWING NO:
	Figure 5-2

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

Table 4-1
Groundwater Elevation Summary (August 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)	August 14, 2013 DTW from TOC (ft below TOC)	Groundwater Elevation August 14, 2013 (ft above msl)
MW-08-01	3634971.461	399637.973	4088.273	13.56	4074.713
MW-08-02	3634945.696	399658.149	4088.726	14.26	4074.466
MW-08-03	3635013.345	399663.352	4087.971	13.1	4074.871
MW-08-04	3635032.485	399734.579	4085.640	10.90	4074.740
MW-08-05	3634985.891	399691.393	4086.543	11.67	4074.873
MW-08-06	3634998.180	399766.517	4084.648	10.51	4074.138
MW-08-07	3634957.670	399676.883	4085.403	10.79	4074.613
MW-08-08	3635047.194	399626.968	4085.072	10.07	4075.002
MW-09-01	3634977.965	399479.072	4085.437	10.09	4075.347
SD08-MW10	3634973.540	399604.2681	4086.683	11.64	4075.043
SD08-MW11	3634929.961	399582.7143	4088.027	13.51	4074.517
SD08-MW12	3634976.038	399863.7146	4076.212	3.27	4072.942
SD08-MW13	3634881.186	399846.4628	4074.681	1.93	4072.751
S10-MW01	3634953.884	399751.455	4086.882	13.50	4073.382
S10-MW02	3634860.324	399609.385	4088.499	14.07	4074.429
S10-MW06 ¹	3634803.437	399827.361	4083.500	10.67	4072.830
SWMU183-MW03	3634908.694	399645.623	4086.261	11.85	4074.411

Notes:

UTM = Universal Transverse Mercator

TOC = Top of Casing

DTW = Depth to Water

ft = feet

msl = mean sea level

¹ S10-MW06 not included in the January 2012 survey conducted by NationView

Table 5-2
Groundwater Analytical Data (July 2013)
Building 131 Washrack (SD-08)
Holloman Air Force Base, New Mexico
NationView Project No. 10-0004

Client Sample Identification: Lab Sample Identification: Date Sampled:	Groundwater Screening Levels		Basewide Background			MW-08-01			MW-08-02			MW-08-03			MW-08-04			MW-08-05			MW-08-06			MW-08-07		
	NMWQCC ¹	USEPA MCL ²	NMED Approved Background Levels ³	Dissolved Metals in Groundwater UTL ⁴	Total Metals in Groundwater UTL ⁴	21307300202			21307300203			21307300201			21307240701			21307240703			21307231904			21307300204		
						7/29/2013			7/29/2013			7/29/2013			7/23/2013			7/23/2013			7/22/2013			7/29/2013		
Analyte						Result ⁵	Q	Q1																		
Volatile Organic Compounds (8260B)	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L																				
1,2-Dichloroethane	10	5	NV	NV	NV	45.4			10.8			0.116	U		0.116	U		2.34	J		0.116	U		39.9	J	
1,2-Dichloropropane	NV	5	NV	NV	NV	6.72			0.15	U		1.12	J													
Acetone	NV	NV	NV	NV	NV	4.78	J		0.193	U																
Benzene	10	5	NV	NV	NV	0.778	J		0.111	U																
Chloroform	100	NV	NV	NV	NV	0.155	U		0.784	J																
sec-Butylbenzene	NV	NV	NV	NV	NV	0.604	J		0.107	U																
tert-Butylbenzene	NV	NV	NV	NV	NV	0.984	J		0.349	J		0.087	U													
Dissolved TAL Metals Analysis (6010B)	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L																				
Arsenic	100	10	10	28.53	NV	5.0	U		0.0050	U		0.005	U		0.005	U		0.005	U		0.05	U		0.025	J	
Barium	1,000	2,000	30.2	30.13	NV	0.0089	J		0.012			0.0039	J		0.01			0.016			0.025	U		0.01		
Calcium	NV	NV	1,151,302	1,151,301.20	NV	387			470			458			483			544			583			545		
Cobalt	50	NV	2.6	2.60	NV	0.0025	U																			
Copper	1,000	1,300	22	57.46	NV	0.0050	U		0.0050	U		0.005	U		0.005	U		0.005	U		0.19	J		0.005	U	
Iron	1,000	300 ⁷	65.6	65.56	NV	7.11			0.90			0.05	U													
Magnesium	NV	NV	3,630,927	3,630,926.70	NV	519			155			588			292			58.4			1230			168		
Manganese	200	50 ⁷	50	118.65	NV	2.47			1.08			0.0038	U		0.0038	U		0.016			0.038	U		1.16	J	
Potassium	NV	NV	120,480	120,479.98	NV	6.20			3.78			20.1			15.5			6.9			31.0			5.54		
Sodium	NV	NV	19,972,499	19,972,499.00	NV	1780			193			2520			668			77.8			4950			429		
Thallium	NV	2	2	15.00	NV	0.005	U																			
Vanadium	NV	NV	73.8	73.73	NV	0.005	U		0.005	U		0.029			0.025			0.0075	J		0.65			0.014	J	
Mercury	2	2	0.5	NV	0.44	0.000068	U																			
Total TAL Metals Analysis (7470A)	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L																				
Mercury	2	2	0.5	NV	0.44	0.000068	U		0.000068	U		0.000068	U		0.0001	J		0.000068	U		0.000068	U		0.000068	U	
General Chemistry	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L																				
Nitrate (USEPA 300.0)	10	10	NV	NV	NV	0.200	U		0.1	U		10.8			6.1			0.351	J		13.2	J		1.69	J	
Solids, Total Dissolved (SM 2540 C)	1,000	500 ⁷	NV	NV	65956.58 ⁸	9100			3710			11700			5590			2950			25300			4180		

Notes:
NMWQCC = New Mexico Water Quality Control Commission
USEPA = United States Environmental Protection Agency

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)

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

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

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

Table 5-2
Groundwater Analytical Data (July 2013)
Building 131 Washrack (SD-08)
Holloman Air Force Base, New Mexico
NationView Project No. 10-0004

Client Sample Identification: Lab Sample Identification: Date Sampled:	Groundwater Screening Levels		Basewide Background			MW-08-08		SD08-MW10		SD08-MW11		SD08-MW12		SD08-MW13		S10-MW01		S10-MW01A								
	NMWQCC ¹	USEPA MCL ²	NMED Approved Background Levels ³	Dissolved Metals in Groundwater UTL ⁴	Total Metals in Groundwater UTL ⁴	21307240702		21308011503		21308011502		21307231903		21308011501		21307240704		21307240705								
						7/23/2013		7/31/2013		7/31/2013		7/22/2013		7/31/2013		7/23/2013		7/23/2013								
Analyte						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								
1,2-Dichloroethane	10	5	NV	NV	NV	0.116	U		0.116	U		80.5			0.116	U		0.116	U		12.7	U		12.4	U	
1,2-Dichloropropane	NV	5	NV	NV	NV	0.15	U		0.15	U		5.37			0.15	U		0.15	U		0.269	J		0.456	J	
Acetone	NV	NV	NV	NV	NV	0.193	U		1.43	J		0.193	U		0.193	U		0.193	U		0.193	U		0.193	U	
Benzene	10	5	NV	NV	NV	0.111	U		58.4			0.111	U		0.111	U		0.111	U		0.111	U		0.111	U	
Chloroform	100	NV	NV	NV	NV	0.155	U		0.155	U		0.155	U		0.155	U		0.155	U		0.155	U		0.155	U	
sec-Butylbenzene	NV	NV	NV	NV	NV	0.107	U		0.107	U		0.107	U		0.107	U		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 (6010B)	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L		
Arsenic	100	10	10	28.53	NV	0.025	U		0.043	U		0.05	U		0.064	J		0.025	U		0.005	U		0.005	U	
Barium	1,000	2,000	30.2	30.13	NV	0.013	U		0.019	U		0.029	U		0.026	J		0.013	U		0.0071	J		0.0063	J	
Calcium	NV	NV	1,151,302	1,151,301.20	NV	644			473			491			753			604			461			443		
Cobalt	50	NV	2.6	2.60	NV	0.013	U		0.0051	J		0.025	U		0.025	U		0.013	U		0.0025	U		0.0025	U	
Copper	1,000	1,300	22	57.46	NV	0.025	U		0.016	J		0.2			0.24			0.096	J		0.005	U		0.005	U	
Iron	1,000	300 ⁷	65.6	65.56	NV	1.00	U		0.5	U		0.5	U		1.00	U		0.5	U		0.5	U		0.5	U	
Magnesium	NV	NV	3,630,927	3,630,926.70	NV	1770			261			1000			3520			1800			571			521		
Manganese	200	50 ⁷	50	118.65	NV	0.095			2.13			2.57			0.069	J		0.019	U		0.16			0.16		
Potassium	NV	NV	120,480	120,479.98	NV	39.9			5.28			23.9			85.3			57			20.8			19.8		
Sodium	NV	NV	19,972,499	19,972,499.00	NV	7330			296			5450			14300			8230			2860			2580		
Thallium	NV	2	2	15.00	NV	0.025	U		0.005	U		0.05	U		0.05	U		0.025	U		0.005	U		0.005	U	
Vanadium	NV	NV	73.8	73.73	NV	0.025			0.061			0.58			0.025			0.4			0.039			0.039		
Mercury	2	2	0.5	NV	0.44	0.0001	J		0.0001	J		0.000068	U		0.83			0.000091	J		0.000068	U		0.00009	J	
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	0.00011	J		0.0001	J		0.000097	J		0.000068	U		0.00011	J		0.000068	U		0.000068	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	15.9			0.02	U		1	U		4.95	J		9.74	J		4.1	J		4.23	J	
Solids, Total Dissolved (SM 2540 C)	1,000	500 ⁷	NV	NV	65956.58 ⁸	39500			4210			24000			69700			39800			13700			13100		

Notes:

NMWQCC = New Mexico Water Quality Control Commission
USEPA = United States Environmental Protection Agency

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)

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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.

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

**Table 6-1
Summary of Selected SD-08 Groundwater Analytical Results Above Action Levels (Jan 2012 - Aug 2013)**

Building 131 Washrack (SD-08)
Holloman Air Force Base, New Mexico
NationView Project No. 10-0004

Monitoring Well	Date Sampled	VOCs (µg/L)			Dissolved TAL Metals (µg/L)				General Chemistry (mg/L)				
		1,2-Dichloroethane	1,2-Dichloropropane	1,2-Dichloroethane	Arsenic	Iron	Manganese	Chloride	Fluoride	Nitrate	Sulfate	TDS	
MW-08-01	1/26/12	44.4	6.49	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	5,340 ¹	1,850	NS	NS	NS	NS	10,700 ¹		
	7/23/12	16.3	2.98 J	3.7 J	5,170	1,710	519	5.41	ND	5,540	9,140		
	10/23/12	29.3	5.58	ND	5,520	1,660	563	3.38	ND	5,780	9,750		
	1/22/13	23.8	4.97 J	ND	6,070	1,840	556	3.28	ND	5,470	8,170		
MW-08-02	4/8/13	27.9 ¹	5.79 ¹	16 J ¹	7,620 ¹	2,390	NS	NS	ND	NS	24,440 ¹		
	7/29/13	45.4	6.72	ND	7,110	2,470	NS	NS	ND	NS	9,100		
	1/26/12	7.82	0.114	26	520	1,030	73.1	7.31	0.09	2,160	3,270		
	4/25/12	11.2	ND	13 J	330	800	NS	NS	NS	NS	3,510		
	7/23/12	4.98 J	ND	30	1,530	2,190	119	4.12	ND	1,960	3,450		
MW-08-03	10/23/12	14.5	ND	40	920	1,150	101	3.53	ND	1,890	3,430		
	1/22/13	63.9	1.38 J	ND	660	1,020	116	3.94	0.132 J	1,940	3,510		
	4/8/13	5.37	ND	33 ¹	777	1,190	NS	NS	ND	NS	3,770		
	7/29/13	10.8	ND	ND	900	3,780	NS	NS	ND	NS	3,710		
	1/25/12	ND	ND	14	ND	ND	4,030	2.95	16.6	4,890	11,800		
MW-08-04	4/25/12	ND	ND	ND	ND	ND	NS	NS	NS	NS	12,300		
	7/23/12	ND	ND	22	ND	ND	4,100	2.21	11.7	5,060	13,200		
	10/23/12	ND	ND	19	ND	ND	5,180	3.11 J	12.3	5,970	13,400		
	1/21/13	ND	ND	ND	ND	ND	4,150	1.51 J	14.2	4,960	14,100		
	4/8/13	ND	ND	ND	ND	ND	NS	NS	20 J	NS	25,500		
MW-08-05	7/29/13	ND	ND	ND	ND	ND	NS	NS	10.8	NS	11,700		
	1/25/12	ND	ND	ND	ND	ND	477	2.26	4.97	3,550	5,060		
	4/24/12	ND	ND	ND	ND	ND	NS	NS	NS	NS	6,060		
	7/23/12	ND	ND	9.2 J	ND	ND	457	1.26	4.18 J	2,950	5,110		
	10/23/12	ND	ND	3.9 J	ND	ND	513	0.901 J	4.19 J	3,130	5,310		
MW-08-06	1/21/13	ND	ND	ND	ND	ND	583	1.02	6.2	2,690	3,280		
	4/8/13	ND	ND	13 J	ND	ND	NS	NS	5.82	NS	5,210		
	7/23/13	ND	ND	ND	ND	ND	NS	NS	6.10	NS	5,590		
	1/25/12	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	24	NS	NS	NS	NS	2,850		
MW-08-07	7/24/12	ND	ND	15	ND	23	34.2	4.55	0.434 J	1,590	2,700		
	10/23/12	ND	ND	ND	ND	56 J	22.6	4.19	ND	1,640	2,930		
	1/21/13	ND	ND	11 J	ND	130	59	5.03	0.321 J	1,630	2,270		
	4/9/13	2.34 J	ND	ND	ND	16	NS	NS	ND	NS	2,890		
	7/23/13	ND	ND	ND	ND	ND	NS	NS	0.351 J	NS	2,950		
MW-08-08	1/24/12	ND	ND	12	ND	ND	6710	3.09	19.4	8,170	19,900		
	4/24/12	ND	ND	ND	ND	ND	NS	NS	NS	NS	19,400		
	7/23/12	ND	ND	22	ND	ND	6240	1.14	15.9	7,970	19,900		
	10/23/12	ND	ND	13	ND	ND	5,860	0.465 J	15.2	7,070	19,800		
	1/21/13	ND	ND	ND	ND	ND	5,320	ND	19	5,390	21,800		
MW-08-09	4/8/13	ND	ND	23	ND	ND	NS	NS	18.4	NS	23,800		
	7/22/13	ND	ND	ND	ND	ND	NS	NS	13.2 J	NS	25,300		
	1/26/12	34.3	0.783 J	48	ND	1,330	436	4.66	2.36 J	2,230	3,840		
	4/25/12	52.5	0.915 J	29	ND	1,370	NS	NS	NS	NS	4,020		
	7/23/12	81.5	1.3 J	53	ND	1,530	452 ¹	3.35 ¹	1.26 J ¹	2,270 ¹	4,360 ¹		
MW-08-10	10/23/12	69.6	1.65 J	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	1,390	413	2.83 ¹	1.47 J ¹	2,150	4,460		
	4/8/13	89.2	ND	56	ND	1,500	NS	NS	0.638 J	NS	4,530		
	7/29/13	39.9	1.12 J	25	ND	1,160	NS	NS	1.69 J	NS	4,180		
	1/25/12	ND	ND	10 J	ND	240	13,500	ND	37.8	8,900	33,600		
MW-08-11	4/24/12	ND	ND	ND	ND	220	NS	NS	NS	NS	29,300		
	7/24/12	ND	ND	ND	ND	79	12,400	ND	25.8	8,070	30,700		
	10/22/12	ND	ND	45 J	ND	41 J	12,300	ND	24.4 J	7,540	31,800		
	1/21/13	ND	ND	ND	ND	90	10,300	ND	33	6,390	31,600		
	4/8/13	ND	ND	ND	ND	ND	NS	NS	38	NS	26,900		
MW-08-12	7/23/13	ND	ND	ND	ND	95	NS	NS	15.9 J	NS	39,500		
	7/31/13	ND	ND	43	540	2,130	NS	NS	ND	NS	4,210		
	7/31/13	80.5	5.37	ND	ND	2,570	NS	NS	ND	NS	24,000		
	7/22/13	ND	ND	64 J	ND	69 J	NS	NS	4.95 J	NS	69,700		
	7/31/13	ND	ND	ND	ND	ND	NS	NS	9.74 J	NS	39,800		
MW-08-13	4/25/12	15.2	ND	ND	ND	240	3,330	3.34	5.42	5,940	12,900		
	7/24/12	17.4	ND	8.7 J	ND	210	3860	2.81	4.44 J	6,190	14,600		
	10/24/12	15.6	0.582 J	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	260 ¹	2390	2.49	5.06 J ¹	4,950	10,800		
	4/9/13	16	ND	31	ND	350	NS	NS	3.79 J	NS	9,600		
MW-08-14	7/23/13	13	0.269 J	ND	ND	160	NS	NS	4.10 J	NS	13,700		
	4/9/13	ND	ND	16 J	ND	ND	NS	NS	13	NS	3,590		
	7/31/13	ND	ND	7.1 J	ND	ND	NS	NS	10.7	NS	3,760		
	7/24/12	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS		
	10/23/12	ND	ND	21	ND	70	2,280	0.638 J	47.1	6,860	14,700		

Table 6-1
Summary of Selected SD-08 Groundwater Analytical Results Above Action Levels (Jan 2012 - Aug 2013)

Building 131 Washrack (SD-08)
 Holloman Air Force Base, New Mexico
 NationView Project No. 10-0004

Monitoring Well	Date Sampled	VOCs (µg/L)		Dissolved TAL Metals (µg/L)			General Chemistry (mg/L)				
		1,2-Dichloroethane	1,2-Dichloropropane	Arsenic	Iron	Manganese	Chloride	Flouride	Nitrate	Sulfate	TDS
S10-MW06	1/21/13	ND	ND	ND	ND	84	2,430	1.23 J	47.5	7,320	15,300
	4/9/13	ND	ND	28	ND	59	NS	NS	49.3	NS	14,900
	7/22/13	ND	ND	ND	ND	190	NS	NS	46.7	NS	15,000
SWMU183-MW03	4/25/12	ND	ND	ND	ND	820	930	1.67	64.2	2780	5,400
	7/24/12	ND	ND	ND	ND	790	907	1.44	55.9	2780	5,520
	10/23/12	ND	ND	12	ND	800	1,010	1.44 J	47.9	2,960	6,330
	1/21/13	ND	ND	ND	ND	670	929	1.69 J	34	3,170	3,730
	4/9/13	ND	ND	16 J	ND	700	NS	NS	36.1	NS	6,120
	7/29/13	ND	ND	ND	ND	1,130	NS	NS	24.2	NS	6,430

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)**



SUSANA MARTINEZ
Governor

JOHN A. SANCHEZ
Lieutenant Governor

**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



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:

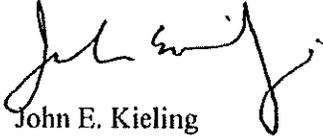
The New Mexico Environment Department (NMED) has reviewed Holloman Air Force Base's November 2, 2011 request to perform eight quarters of groundwater monitoring at Site SD-08 (SWMU 82). The analytical parameters to be collected include Volatile Organic Compounds (VOCs), Target Analyte List (TAL) Metals, 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.

Mr. A. David Budak
November 22, 2011
Page 2 of 2

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**

**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

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

*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.

Holloman Air Force Base
 Site Investigation at Waste Sites SB-06, SD-15, AOC-RR, and AOC-SB-03
 SI Report

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 (%)	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	-	0.0090
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
 - 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 SB01-6-5	AOC-RR SB01-10-12	AOC-RR SB02-3-4	AOC-RR SB02-2-10	AOC-RR SB02-5-10	AOC-RR SB03-4-6	AOC-RR SB03-8-10	AOC-RR SB04-2-4
	Background*	Risk-based Level**								
SAMPLE DEPTH (feet)	-	-	6-8	10-12	2-4	2-4	8-10	4-6	8-10	2-4
VOLATILE ORGANICS - METHOD 8240 (mg/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*	<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*	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*	Risk-Based Levels					
SAMPLE DEPTH (feet)	-	-	6-8	2-4	6-8	2-4	6-8
VOLATILE ORGANICS - METHOD 8240 (mg/kg)							
All Constituents	N/A	N/A	ND	ND	ND	ND	ND
TOTAL PETROLEUM HYDROCARBONS - METHOD 8015 (mg/kg)	N/A	1000*	<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*	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

^aBasewide Background Study Holloman AFB (Radman, 1993).

^bEPA Region III Risk-based levels (R.L. Smith, November 1994).

^cNMED USTB Correspondence to Holloman AFB, dated November 2, 1992.

^dEPA 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-06	AOC-RR GP-ASDUP	AOC-RR GP-07	AOC-RR GP-08	AOC-RR GP-09
	Background	Regulatory										
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-06	AOC-RR GP-09	AOC-RR GP-11	AOC-RR GP-12	AOC-RR GP-13	AOC-RR GP-14	AOC-RR GP-15	AOC-RR GP-16	
	Background	Background Level									
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	1,500	<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	7.55	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

Basewide Background Study for Holloman AFB (Radionuclides, 1993).

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

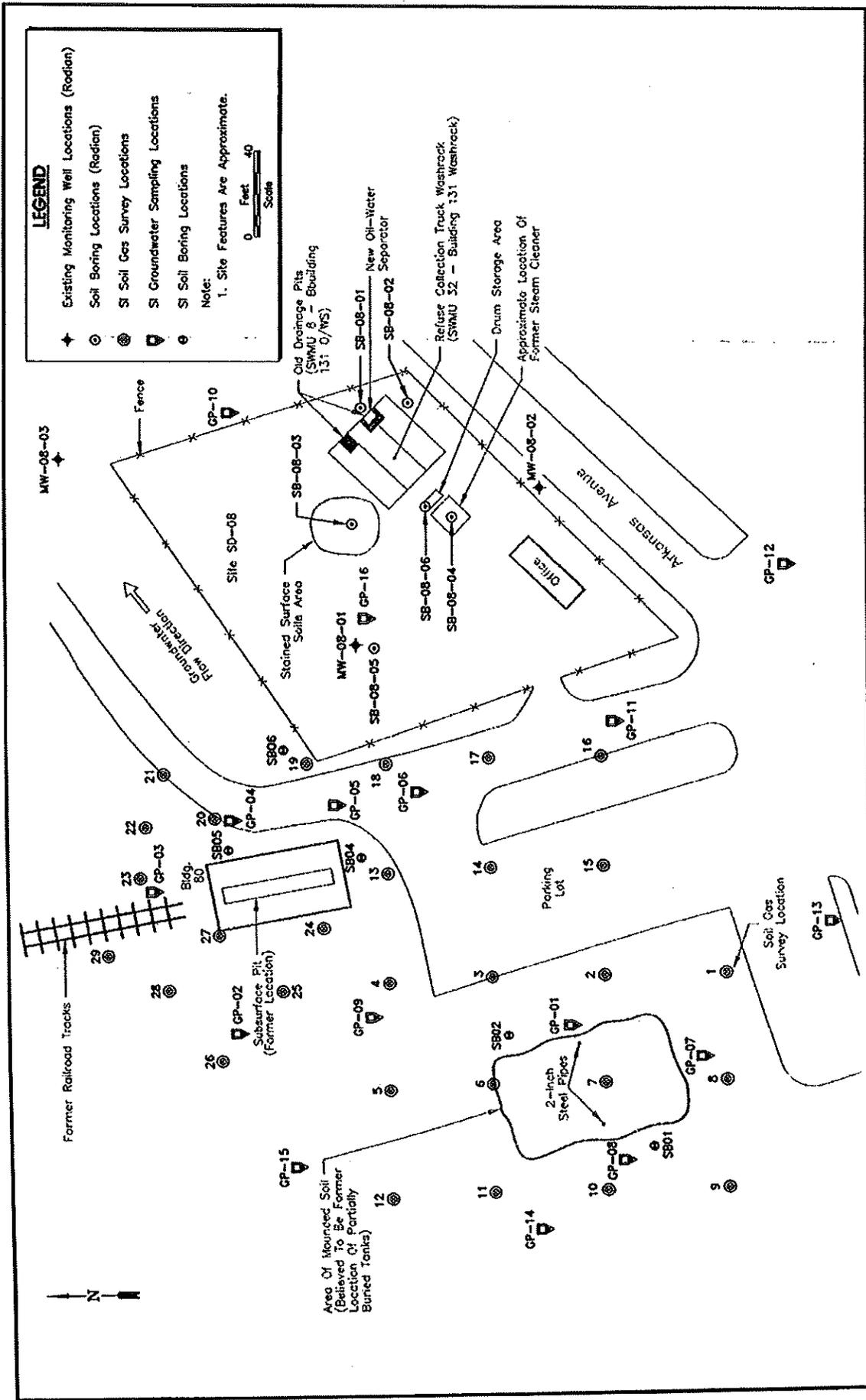


Figure 3-1. Site Map
Site AOC-RR, Railroad Building 80

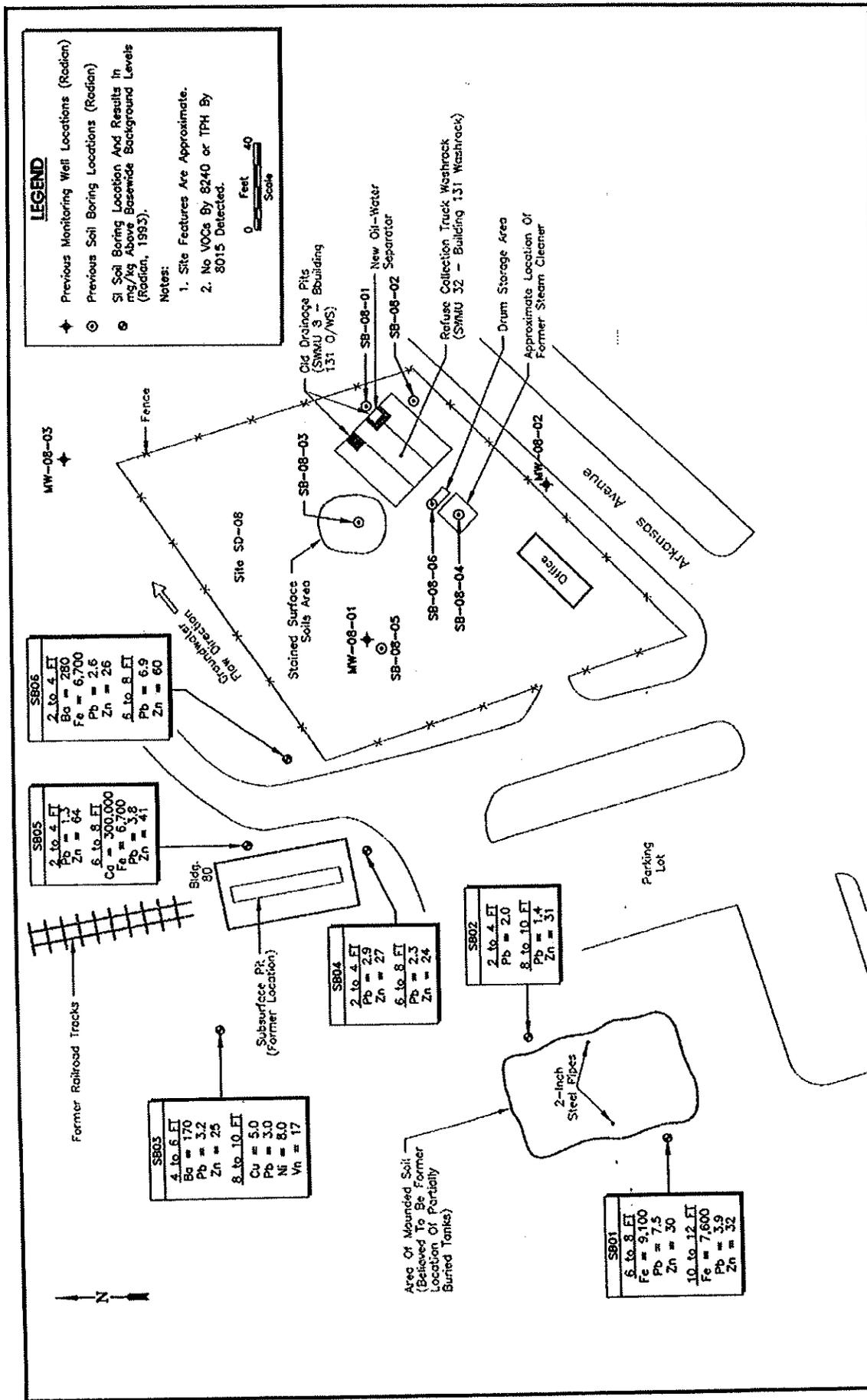


Figure 3-3. Soil Sample Results, March - April 1995
 Site AOC-RR, Railroad Building 80

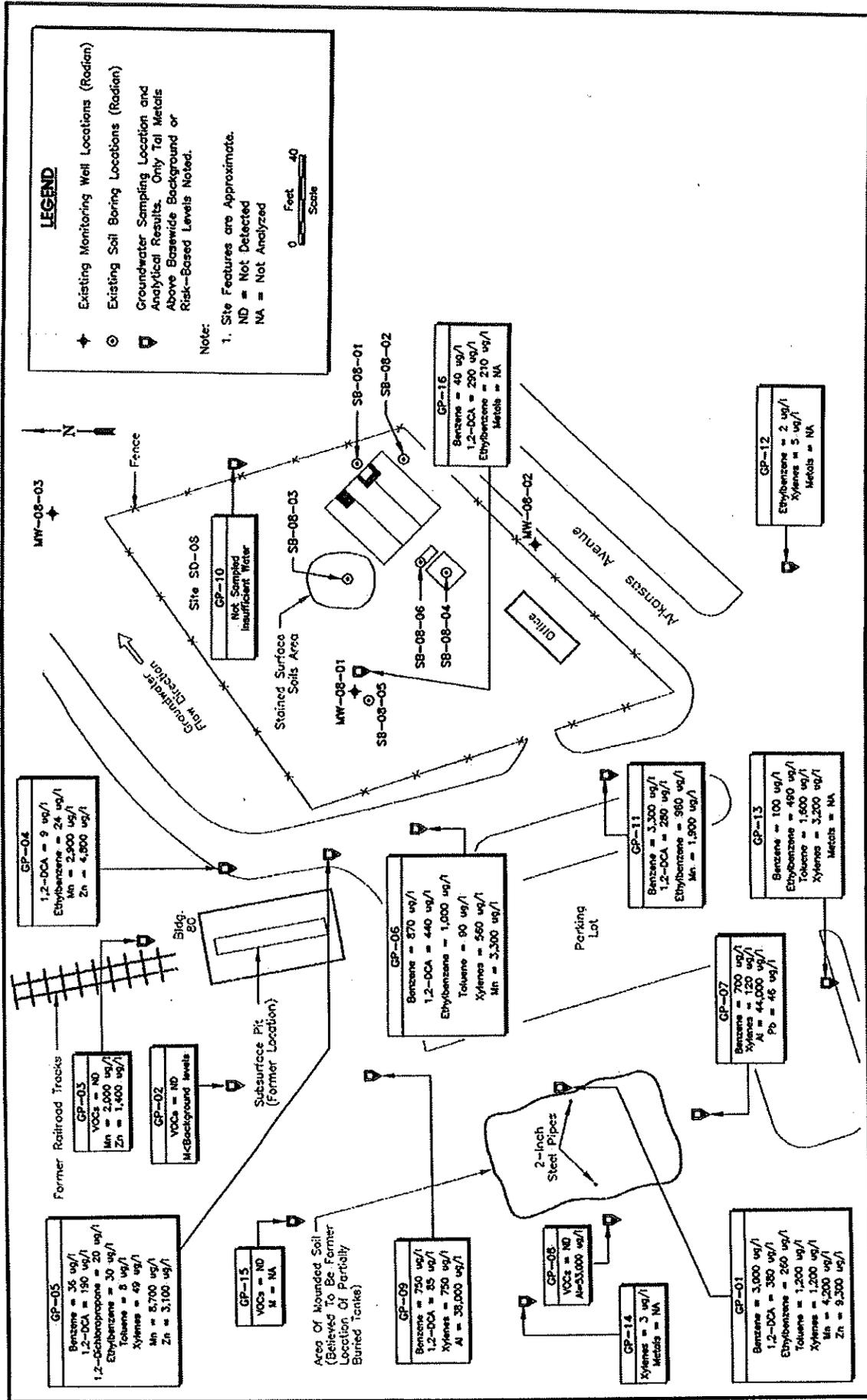


Figure 3-4. Groundwater Analytical Results, April 1995
 Site AOC-RR Railroad, Building 80

APPENDIX B

Depth to Water Field Form



WATER LEVEL DATA SUMMARY

Project Name:	SD-08 Quarterly Sampling	Date:	08/14/2013	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							

Well Number	Time (hhmm)	Measuring Point		Depth to Water (ft, TOC)	Elevation of Water (ft, NGVD)
		Description	Elevation (ft, NGVD)		
MW-08-01	1410			13.56	
MW-08-02	1355			14.26	
MW-08-03	1405			13.10	
MW-08-04	1315			10.90	
MW-08-05	1320			11.67	
MW-08-06	1310			10.51	
MW-08-07	1400			10.79	
MW-08-08	1350			10.07	
SD08-MW10	1345			11.64	
SD08-MW11	1340			13.51	
SD08-MW12	1305			03.27	
SD08-MW13	1300			01.93	
S10-MW01	1325			13.15	
S10-MW02	1335			14.07	

Notes:
TOC = Top of Well Casing

NGVD = National Geodetic Vertical Datum

Comments/Observations:

APPENDIX C

Groundwater Sampling Field Forms



MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site: SD-08	Location ID: MW-08-02	Date: 7/29/2013
	Project Name: Long Term Monitoring	Project No./Phase: 10-0004	Recorded By: B. Parrish
EQUIPMENT	Pump Type: Geopump (Peristaltic)	Water Quality Meter: Horiba U-52	PID Type/ID#: NA
	Water Level Indicator Type: Solinst	Other Equipment: Hanna Turbidity Meter	Decon Method: Liqueox soap & DI water rinse
	Tubing Type/Diameter (in): 1/4" OD Poly	Other Equipment:	PPE Level: D C B A
WELL INFO	(A) Initial Depth to Water (ft BTOC): 14.34	Casing: Type PVC Diam. (in) 2.00	Weather: Clear- Sunny
	(B) Total Well Depth (ft BTOC): 18.58	(E) Casing Volume Multiplier (gal/in ft): 0.16	Background PID (ppm): NA
	(C) Water Column Thickness (ft) (B-A): 4.24	Screen Length (in ft):	Breathing Zone PID (ppm): NA
	(D) Well Volume (gal) (C x E): 0.68	Screen Info: Type: Factory Slot Slot Size: 0.010-inch	Well Opening PID (ppm): NA

DATE (mmddyy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (mL)	Pumping Rate (mL/min)	Temp (°C)	pH	Cond. (mS/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	Oxidation Reduction Potential (mV)	Remarks (odor, clarity, etc.)
7/29/2013	0950	14.66	2,577	500	23.96	6.51	2.28	0.09	2.40	-51.8	Clear, no odor
7/29/2013	0956	14.68	5,577	500	23.94	6.55	2.19	0.08	1.20	-52.4	
7/29/2013	1002	14.69	8,577	500	23.91	6.58	2.12	0.08	1.00	-51.9	

Colorimeter Results		No. Containers/Volume/Type		Preserv.		Filter (Y/N)		Method		Parameter(s)	
Time	Analyte	Dilution	Result	Units							
					3	40 ml	VOAs	HCl	N	8260B	VOCs
					1	500 ml	Plastic	None	N	300	Nitrate
					1	250 ml	Plastic	HNO3	Y	6010	Metals-Dissolved
					1	250 ml	Plastic	HNO3	N	7470	Mercury-Total
					1	250 ml	Plastic	None	N	2540	TDS
Sample Identification MW-08-02											
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	N/A							



MONITORING WELL SAMPLE COLLECTION FORM

LOCATION		Site: SD-08	Location ID: MW-08-04	Date: 7/23/2013									
		Project Name: Long Term Monitoring	Project No./Phase: 10-0004	Recorded By: B. Parrish									
EQUIPMENT		Pump Type: Geopump (Peristaltic)	Water Quality Meter: Horiba U-52	PID Type/ID#: NA									
		Water Level Indicator Type: Solinst	Other Equipment: Hanna Turbidity Meter	Decon Method: Liqueox soap & DI water rinse									
		Tubing Type/Diameter (in): 1/4" OD Poly	Other Equipment:	PPE Level: D C B A									
WELL INFO		(A) Initial Depth to Water (ft BTOC): 11.61	Casing: Type PVC Diam. (in) 2.00	Weather: Clear- Pthy Cloudy									
		(B) Total Well Depth (ft BTOC): 17.90	(E) Casing Volume Multiplier (gal/in ft): 0.16	Background PID (ppm): NA									
		(C) Water Column Thickness (ft) (B-A): 6.29	Screen Length (in ft):	Breathing Zone PID (ppm): NA									
		(D) Well Volume (gal) (C x E): 1.01	Screen Info: Type: Factory Slot Slot Size: 0.010-inch	Well Opening PID (ppm): NA									
CASING INFO		Riser/Well Casing Inner Diameter (in) 0.50	1.00	1.50	2.00	3.00	4.00	5.0	6.0	8.0	10		
		(D) Casing Volume Multiplier (gal/in 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 (mL)	Pumping Rate (mL/min)	Temp (°C)	pH	Cond. (mS/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	Oxidation Reduction Potential (mV)	Remarks (odor, clarity, etc.)		
7/23/2013	0820	16.34	11,484	500	19.62	7.09	2.68	12.79	1.20	280	Clear, no odor		
7/23/2013	0828	16.62	15,312	500	19.68	7.08	2.68	12.94	1.10	288.7			
7/23/2013	0835	16.94	19,140	500	19.74	7.08	2.68	12.99	1.10	290.5			
Colorimeter Results		Analyte	Dilution	Result	Units	No. Containers/Volume/Type		Preserv.	Filter (Y/N)	Method	Parameter(s)		
Time						3	40 ml	VOAs	HCl	8260B	VOCs		
						1	500 ml	Plastic	None	300	Nitrate		
						1	250 ml	Plastic	HNO3	6010	Metals-Dissolved		
						1	250 ml	Plastic	HNO3	7470	Mercury-Total		
						1	250 ml	Plastic	None	2540	TDS		
		Sample Identification											
		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	N/A									



MONITORING WELL SAMPLE COLLECTION FORM

LOCATION		Site: SD-08	Location ID: MW-08-06	Date: 7/22/2013							
		Project Name: Long Term Monitoring	Project No./Phase: 10-0004	Recorded By: B. Parrish							
EQUIPMENT		Pump Type: Geopump (Peristaltic)	Water Quality Meter: Horiba U-52	PID Type/ID#: NA							
		Water Level Indicator Type: Solinst	Other Equipment: Hanna Turbidity Meter	Decon Method: Liquinox soap & DI water rinse							
		Tubing Type/Diameter (in): 1/4" OD Poly	Other Equipment:	PPE Level: D C B A							
WELL INFO		(A) Initial Depth to Water (ft BTOC): 11.07	Casing: Type PVC Diam. (in) 2.00	Weather: Clear- Sunny							
		(B) Total Well Depth (ft BTOC): 14.48	(E) Casing Volume Multiplier (gal/in ft): 0.16	Background PID (ppm): NA							
		(C) Water Column Thickness (ft) (B-A): 3.41	Screen Length (in ft):	Breathing Zone PID (ppm): NA							
		(D) Well Volume (gal) (C x E):	Screen Info: Type: Factory Slot Slot Size: 0.010-inch	Well Opening PID (ppm): NA							
CASING INFO		Riser/Well Casing Inner Diameter (in) 0.50	1.00	1.50	2.00	3.00	4.00	5.0	6.0	8.0	10
		(D) Casing Volume Multiplier(gal/in 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 (mL)	Pumping Rate (mL/min)	Temp (°C)	pH	Cond. (mS/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	Oxidation Reduction Potential (mV)	Remarks (odor, clarity, etc.)
7/22/2013	1050	11.48	2,085	500	20.32	7.07	28.13	0.91	0.90	281.7	After 3 volumes removed
7/22/2013	1054	1.55	4,170	500	20.28	7.08	28.11	0.90	0.90	282.5	
7/22/2013	1058	11.63	6,255	500	20.25	7.08	28.11	0.90	0.90	283.3	
Colorimeter Results		Analyte	Dilution	Result	Units	No. Containers/Volume/Type	Preserv.	Filter (Y/N)	Method	Parameter(s)	
Time						3 40 ml VOAs	HCl	N	8260B	VOCs	
						1 500 ml Plastic	None	N	300	Nitrate	
						1 250 ml Plastic	HNO3	Y	6010	Metals-Dissolved	
						1 250 ml Plastic	HNO3	N	7470	Mercury-Total	
						1 250 ml Plastic	None	N	2540	TDS	
		Sample Identification									
		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	N/A						



MONITORING WELL SAMPLE COLLECTION FORM

LOCATION		Site: SD-08	Location ID: MW-08-07	Date: 7/29/2013							
Project Name: Long Term Monitoring		Project No./Phase: 10-0004	Recorded By: B. Parrish								
EQUIPMENT		Pump Type: Geopump (Peristaltic)	Water Quality Meter: Horiba U-52	PID Type/ID#: NA							
Water Level Indicator Type: Solinst		Other Equipment: Hanna Turbidity Meter	Decon Method: Liquinox soap & DI water rinse								
Tubing Type/Diameter (in): 1/4" OD Poly		Other Equipment:	PPE Level: D C B A								
WELL INFO		(A) Initial Depth to Water (ft BTOC): 10.87	Casing: Type PVC Diam. (in) 2.00	Weather: Clear- Sunny							
(B) Total Well Depth (ft BTOC): 16.44		(E) Casing Volume Multiplier (gal/in ft): 0.16	Background PID (ppm): NA								
(C) Water Column Thickness (ft) (B-A): 5.57		Screen Length (in ft):	Breathing Zone PID (ppm): NA								
(D) Well Volume (gal) (C x E): 0.89		Screen Info: Type: Factory Slot Slot Size: 0.010-inch	Well Opening PID (ppm): NA								
CASING INFO		Riser/Well Casing Inner Diameter (in) 0.50	1.00	1.50	2.00	3.00	4.00	5.0	6.0	8.0	10
(D) Casing Volume Multiplier (gal/in ft) 0.02		0.04	0.10	0.16	0.38	0.65	1.02	1.47	2.61	4.08	
DATE (mm/dd/yy)	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (mL)	Pumping Rate (mL/min)	Temp (°C)	pH	Cond. (mS/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	Oxidation Reduction Potential (mV)	Remarks (odor, clarity, etc.)
7/29/2013	1043	10.93	3.373	500	23.87	6.49	2.09	0.10	4.40	-1.1	Slight Fuel Odor, clear
7/29/2013	1050	10.96	6.873	500	23.80	6.53	2.04	0.10	3.20	2.6	
7/29/2013	1057	10.94	10.373	500	23.74	6.58	2.01	0.11	2.20	8.4	
Colorimeter Results		Analyte	Dilution	Result	Units	No. Containers/Volume/Type	Preserv.	Filter (Y/N)	Method	Parameter(s)	
Time											
						3 40 ml VOAs	HCl	N	8260B	VOCs	
						1 500 ml Plastic	None	N	300	Nitrate	
						1 250 ml Plastic	HNO3	Y	6010	Metals-Dissolved	
						1 250 ml Plastic	HNO3	N	7470	Mercury-Total	
						1 250 ml Plastic	None	N	2540	TDS	
Conversions		Sample Identification MW-08-07									
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	N/A							



MONITORING WELL SAMPLE COLLECTION FORM

LOCATION		Site: SD-08	Location ID: MW-08-08	Date: 7/23/2013							
Project Name: Long Term Monitoring		Project No./Phase: 10-0004	Recorded By: B. Parrish								
EQUIPMENT		Pump Type: Geopump (Peristaltic)	Water Quality Meter: Horiba U-52	PID Type/ID#: NA							
Water Level Indicator Type: Solinst		Other Equipment: Hanna Turbidity Meter	Decon Method: Liquinox soap & DI water rinse								
Tubing Type/Diameter (in): 1/4" OD Poly		Other Equipment:	PPE Level: D C B A								
WELL INFO		(A) Initial Depth to Water (ft BTOC): 10.71	Casing: Type PVC Diam. (in) 2.00	Weather: Cloudy							
		(B) Total Well Depth (ft BTOC): 15.98	(E) Casing Volume Multiplier (gal/in ft): 0.16	Background PID (ppm): NA							
		(C) Water Column Thickness (ft) (B-A): 5.27	Screen Length (in ft):	Breathing Zone PID (ppm): NA							
		(D) Well Volume (gal) (C x E): 0.84	Screen Info: Type: Factory Slot Slot Size: 0.010-inch	Well Opening PID (ppm): NA							
CASING INFO		Riser/Well Casing Inner Diameter (in) 0.50	1.00	1.50	2.00	3.00	4.00	5.0	6.0	8.0	10
		(D) Casing Volume Multiplier (gal/in 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 (mL)	Pumping Rate (mL/min)	Temp (°C)	pH	Cond. (mS/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	Oxidation Reduction Potential (mV)	Remarks (odor, clarity, etc.)
7/23/2013	0910	11.29	3,184	500	21.31	6.34	2.76	4.58	13.00	200.3	
7/23/2013	0917	11.58	6,368	500	21.30	6.32	2.75	3.41	2.60	179.7	
7/23/2013	0924	11.78	9,552	500	21.39	6.32	2.77	3.39	1.70	156.9	
7/23/2013	0931	11.96	12,736	500	21.36	6.32	2.76	3.38	1.1	140.1	
Colorimeter Results		Analyte	Dilution	Result	Units	No. Containers/Volume/Type	Preserv.	Filter (Y/N)	Method	Parameter(s)	
Time						3 40 ml VOAs	HCl	N	8260B	VOCs	
						1 500 ml Plastic	None	N	300	Nitrate	
						1 250 ml Plastic	HNO3	Y	6010	Metals-Dissolved	
						1 250 ml Plastic	HNO3	N	7470	Mercury-Total	
						1 250 ml Plastic	None	N	2540	TDS	
		Sample Identification									
		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	N/A							



MONITORING WELL SAMPLE COLLECTION FORM

LOCATION		Site: SD-08	Location ID: SD08-MW11	Date: 7/31/2013							
Project Name: Long Term Monitoring		Project No./Phase: 10-0004	Recorded By: B. Parrish								
EQUIPMENT		Pump Type: Geopump (Peristaltic)	Water Quality Meter: Horiba U-52	PID Type/ID#: NA							
Water Level Indicator Type: Solinst		Other Equipment: Hanna Turbidity Meter	Decon Method: Liquinox soap & DI water rinse								
Tubing Type/Diameter (in): 1/4" OD Poly		Other Equipment:	PPE Level: D C B A								
WELL INFO		(A) Initial Depth to Water (ft BTOC): 13.79	Casing: Type PVC Diam. (in) 2.00	Weather: Clear- Sunny							
(B) Total Well Depth (ft BTOC): 20.52		(E) Casing Volume Multiplier (gal/fin ft): 0.16	Background PID (ppm):	NA							
(C) Water Column Thickness (ft) (B-A): 6.73		Screen Length (lin ft):	Breathing Zone PID (ppm):	NA							
(D) Well Volume (gal) (C x E): 1.08		Screen Info: Type: Factory Slot Slot Size: 0.010-inch	Well Opening PID (ppm):	NA							
CASING INFO		Riser/Well Casing Inner Diameter (in) 0.50	1.00	1.50	2.00	3.00	4.00	5.0	6.0	8.0	10
(D) Casing Volume Multiplier(gal/fin 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 (mL)	Pumping Rate (mL/min)	Temp (°C)	pH	Cond. (mS/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	Oxidation Reduction Potential (mV)	Remarks (odor, clarity, etc.)
7/31/2013	0920	14.76	4.093	500	21.28	6.76	16.43	0.91	5.30	123.6	Clear, No Odor
7/31/2013	0929	15.58	8.593	500	21.15	6.76	15.81	0.93	3.00	124.1	
7/31/2013	0938	16.28	13.093	500	21.12	6.74	15.32	0.95	1.30	122.00	
Colorimeter Results		Analyte	Dilution	Result	Units	No. Containers/Volume/Type		Preserv.	Filter (Y/N)	Method	Parameter(s)
Time						3	40 ml	VOAs	HCl	8260B	VOCs
						1	500 ml	Plastic	None	300	Nitrate
						1	250 ml	Plastic	HNO3	6010	Metals-Dissolved
						1	250 ml	Plastic	HNO3	7470	Mercury-Total
						1	250 ml	Plastic	None	2540	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	N/A							



MONITORING WELL SAMPLE COLLECTION FORM

LOCATION		Site: SD-08	Location ID: SD08-MW12	Date: 7/22/2013							
Project Name: Long Term Monitoring		Project No./Phase: 10-0004	Recorded By: B. Parrish								
EQUIPMENT		Pump Type: Geopump (Peristaltic)	Water Quality Meter: Horiba U-52	PID Type/ID#: NA							
Water Level Indicator Type: Solinst		Other Equipment: Hanna Turbidity Meter	Decon Method: Liquinox soap & DI water rinse								
Tubing Type/Diameter (in): 1/4" OD Poly		Other Equipment:	PPE Level: D C B A								
WELL INFO		(A) Initial Depth to Water (ft BTOC): 3.46	Casing: Type PVC Diam. (in) 2.00	Weather: Clear- Sunny							
(B) Total Well Depth (ft BTOC): 15.49		(E) Casing Volume Multiplier (gal/in ft): 0.16	Background PID (ppm): NA								
(C) Water Column Thickness (ft) (B-A): 12.03		Screen Length (in ft):	Breathing Zone PID (ppm): NA								
(D) Well Volume (gal) (C x E):		Type: Factory Slot Slot Size: 0.010-inch	Well Opening PID (ppm): NA								
CASING INFO		Riser/Well Casing Inner Diameter (in) 0.50	1.00	1.50	2.00	3.00	4.00	5.0	6.0	8.0	10
(D) Casing Volume Multiplier(gal/in 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 (mL)	Pumping Rate (mL/min)	Temp (°C)	pH	Cond. (mS/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	Oxidation Reduction Potential (mV)	Remarks (odor, clarity, etc.)
7/22/2013	0950	4.06	7,277	500	21.84	6.63	59.7	0.15	4.80	270.4	After 3 Volumes Removed
7/22/2013	1004	4.10	14,554	500	21.76	6.63	59.83	0.16	3.80	261.8	Clear, No Odor
7/22/2013	1019	4.13	21,813	500	21.71	6.63	59.85	0.16	2.90	253.60	
Colorimeter Results		Analyte	Dilution	Result	Units	No. Containers/Volume/Type	Preserv.	Filter (Y/N)	Method	Parameter(s)	
Time											
						3 40 ml	HCl	N	8280B	VOCs	
						1 500 ml	None	N	300	Nitrate	
						1 250 ml	HNO3	Y	6010	Metals-Dissolved	
						1 250 ml	HNO3	N	7470	Mercury-Total	
						1 250 ml	None	N	2540	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	N/A							

APPENDIX D

**Laboratory Analytical Results
(Provided on Enclosed CD)**

ANALYTICAL RESULTS

PERFORMED BY

GULF COAST ANALYTICAL LABORATORIES, INC.

7979 GSRI Avenue

Baton Rouge, LA 70820

Report Date 07/31/2013

GCAL Report 213072319



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

Attn Jim Moore

Project Holloman AFB

CASE NARRATIVE

Client: NationView LLC **Report:** 213072319

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 SW-846 8260B analysis for analytical batch 512414, the MS/MSD exhibited recovery failures. The LCS/LCSD recoveries are acceptable.

METALS

In the SW-846 6010C Dissolved analysis for prep batch 512143, the MS/MSD recoveries are not applicable for Calcium and Magnesium because the sample concentration is greater than four times the spike concentration. The MS/MSD recoveries are not applicable for Sodium because the sample concentration is greater than four times the spike concentration.

In the SW-846 6010C Dissolved analysis, all samples had to be diluted to eliminate a chemical or physical interference and/or to bracket the concentration of target analytes within the linear dynamic range of the instrument. 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.

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

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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.

Karen M. Miller, Data Del


Authorized Signature
GCAL REPORT 213072319

THIS REPORT CONTAINS 46 PAGES.

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307231901	S10-MW06	Water	07/22/2013 09:00	07/23/2013 10:30
21307231902	S10-MW06-A	Water	07/22/2013 09:00	07/23/2013 10:30
21307231903	SD08-MW12	Water	07/22/2013 10:20	07/23/2013 10:30
21307231904	MW-08-06	Water	07/22/2013 11:00	07/23/2013 10:30
21307231905	MW-08-06-MS	Water	07/22/2013 11:00	07/23/2013 10:30
21307231906	MW-08-06-MSD	Water	07/22/2013 11:00	07/23/2013 10:30
21307231907	TRIP BLANK	Water	07/22/2013 00:00	07/23/2013 10:30

Summary of Compounds Detected

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307231901	S10-MW06	Water	07/22/2013 09:00	07/23/2013 10:30

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-70-2	Calcium	439	8.00	2.00	mg/L
7440-50-8	Copper	0.15J	0.20	0.050	mg/L
7439-95-4	Magnesium	588	2.00	0.50	mg/L
7439-96-5	Manganese	0.19	0.15	0.038	mg/L
7440-09-7	Potassium	29.4	5.00	1.25	mg/L
7440-23-5	Sodium	3210	10.0	2.50	mg/L
7440-62-2	Vanadium	0.45	0.20	0.050	mg/L

EPA 300.0

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	46.7	10.0	0.400	mg/L

SM 2540 C - 1997

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	15000	10.0	4.39	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307231902	S10-MW06-A	Water	07/22/2013 09:00	07/23/2013 10:30

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-70-2	Calcium	462	8.00	2.00	mg/L
7440-50-8	Copper	0.15J	0.20	0.050	mg/L
7439-95-4	Magnesium	654	2.00	0.50	mg/L
7439-96-5	Manganese	0.14J	0.15	0.038	mg/L
7440-09-7	Potassium	31.3	5.00	1.25	mg/L
7440-23-5	Sodium	3470	10.0	2.50	mg/L
7440-62-2	Vanadium	0.46	0.20	0.050	mg/L

EPA 300.0

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	45.7	10.0	0.400	mg/L

SM 2540 C - 1997

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	15200	10.0	4.39	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307231903	SD08-MW12	Water	07/22/2013 10:20	07/23/2013 10:30

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	0.50J	2.00	0.50	mg/L
7440-38-2	Arsenic	0.064J	0.20	0.050	mg/L
7440-39-3	Barium	0.026J	0.10	0.025	mg/L
7440-70-2	Calcium	753	8.00	2.00	mg/L
7440-50-8	Copper	0.24	0.20	0.050	mg/L
7439-95-4	Magnesium	3520	2.00	0.50	mg/L
7439-96-5	Manganese	0.069J	0.15	0.038	mg/L
7440-09-7	Potassium	85.3	5.00	1.25	mg/L
7440-62-2	Vanadium	0.83	0.20	0.050	mg/L

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	Sodium	14300	100	25.0	mg/L

SM 2540 C - 1997

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	69700	10.0	4.39	mg/L

EPA 300.0

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	4.95J	50.0	2.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307231904	MW-08-06	Water	07/22/2013 11:00	07/23/2013 10:30

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-70-2	Calcium	583	8.00	2.00	mg/L
7440-50-8	Copper	0.19J	0.20	0.050	mg/L
7439-95-4	Magnesium	1230	2.00	0.50	mg/L
7440-09-7	Potassium	31.0	5.00	1.25	mg/L
7440-62-2	Vanadium	0.65	0.20	0.050	mg/L

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	Sodium	6430	100	25.0	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307231904	MW-08-06	Water	07/22/2013 11:00	07/23/2013 10:30

EPA 300.0

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	13.2J	25.0	1.00	mg/L

SM 2540 C - 1997

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	25300	10.0	4.39	mg/L

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
67-66-3	Chloroform	0.784J	5.00	0.155	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307231905	MW-08-06-MS	Water	07/22/2013 11:00	07/23/2013 10:30

SW-846 7470A Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.0046	0.00020	0.000068	mg/L

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	5.00	2.00	0.50	mg/L
7440-36-0	Antimony	0.53J	0.60	0.15	mg/L
7440-38-2	Arsenic	0.56	0.20	0.050	mg/L
7440-39-3	Barium	0.53	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	602	8.00	2.00	mg/L
7440-47-3	Chromium	0.51	0.10	0.025	mg/L
7440-48-4	Cobalt	0.49	0.10	0.025	mg/L
7440-50-8	Copper	0.71	0.20	0.050	mg/L
7439-89-6	Iron	4.75	2.00	0.50	mg/L
7439-92-1	Lead	0.47	0.15	0.038	mg/L
7439-95-4	Magnesium	1260	2.00	0.50	mg/L
7439-96-5	Manganese	0.47	0.15	0.038	mg/L
7440-02-0	Nickel	0.51	0.40	0.10	mg/L
7440-09-7	Potassium	41.0	5.00	1.25	mg/L
7782-49-2	Selenium	0.52	0.40	0.10	mg/L
7440-22-4	Silver	0.51	0.10	0.025	mg/L
7440-28-0	Thallium	0.51	0.20	0.050	mg/L
7440-62-2	Vanadium	1.17	0.20	0.050	mg/L
7440-66-6	Zinc	0.49	0.20	0.050	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307231905	MW-08-06-MS	Water	07/22/2013 11:00	07/23/2013 10:30

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	Sodium	6630	100	25.0	mg/L

SW-846 7470A Water

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.0040	0.00020	0.000068	mg/L

EPA 300.0 Inorganic Anions

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	127	25.0	1.00	mg/L

SW-846 8260B Water

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	51.6	5.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	50.1	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	53.8	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	50.6	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	46.9	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	50.9	5.00	0.208	ug/L
563-58-6	1,1-Dichloropropene	48.6	5.00	0.052	ug/L
96-18-4	1,2,3-Trichloropropane	53.8	5.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	48.4	5.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	45.7	5.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	68.3	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	53.6	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	47.3	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	49.7	5.00	0.116	ug/L
540-59-0	1,2-Dichloroethene(Total)	95.3	10.0	0.180	ug/L
78-87-5	1,2-Dichloropropane	50.1	5.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	44.1	5.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	47.7	5.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	49.3	5.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	45.7	5.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	44.8	5.00	0.170	ug/L
78-93-3	2-Butanone	55.6	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	44.9	5.00	0.080	ug/L
591-78-6	2-Hexanone	65.3	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	48.0	5.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	44.7	5.00	0.070	ug/L
108-10-1	4-Methyl-2-pentanone	66.4	5.00	0.120	ug/L
67-64-1	Acetone	46.0	5.00	0.193	ug/L
71-43-2	Benzene	48.6	5.00	0.111	ug/L
108-86-1	Bromobenzene	44.8	5.00	0.145	ug/L
74-97-5	Bromochloromethane	52.2	5.00	0.127	ug/L
75-27-4	Bromodichloromethane	51.5	5.00	0.083	ug/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307231905	MW-08-06-MS	Water	07/22/2013 11:00	07/23/2013 10:30

SW-846 8260B Water

CAS#	Parameter	Result	RDL	MDL	Units
75-25-2	Bromoform	56.0	5.00	0.215	ug/L
74-83-9	Bromomethane	44.7	5.00	0.427	ug/L
75-15-0	Carbon disulfide	47.4	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	48.6	5.00	0.248	ug/L
108-90-7	Chlorobenzene	47.9	5.00	0.083	ug/L
75-00-3	Chloroethane	32.7	5.00	0.235	ug/L
67-66-3	Chloroform	48.7	5.00	0.155	ug/L
74-87-3	Chloromethane	51.8	5.00	0.144	ug/L
124-48-1	Dibromochloromethane	53.0	5.00	0.054	ug/L
74-95-3	Dibromomethane	51.8	5.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	46.2	5.00	0.145	ug/L
100-41-4	Ethylbenzene	46.8	5.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	47.9	5.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	48.0	5.00	0.130	ug/L
74-88-4	Methyl iodide	54.6	5.00	0.084	ug/L
75-09-2	Methylene chloride	47.6	5.00	0.149	ug/L
91-20-3	Naphthalene	56.5	5.00	0.176	ug/L
100-42-5	Styrene	44.7	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	50.0	5.00	0.193	ug/L
108-88-3	Toluene	49.0	5.00	0.122	ug/L
79-01-6	Trichloroethene	49.5	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	52.4	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	51.1	5.00	0.158	ug/L
75-01-4	Vinyl chloride	51.3	5.00	0.127	ug/L
1330-20-7	Xylene (total)	143	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	47.7	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	50.8	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	95.8	10.0	0.123	ug/L
104-51-8	n-Butylbenzene	43.7	5.00	0.123	ug/L
103-65-1	n-Propylbenzene	44.5	5.00	0.727	ug/L
95-47-6	o-Xylene	47.6	5.00	0.055	ug/L
135-98-8	sec-Butylbenzene	46.3	5.00	0.107	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	49.7	5.00	0.078	ug/L
98-06-6	tert-Butylbenzene	46.0	5.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	47.6	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	52.3	5.00	0.128	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	55.5	5.00	0.264	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307231906	MW-08-06-MSD	Water	07/22/2013 11:00	07/23/2013 10:30

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	5.24	2.00	0.50	mg/L
7440-36-0	Antimony	0.54J	0.60	0.15	mg/L
7440-38-2	Arsenic	0.52	0.20	0.050	mg/L
7440-39-3	Barium	0.53	0.10	0.025	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307231906	MW-08-06-MSD	Water	07/22/2013 11:00	07/23/2013 10:30

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-41-7	Beryllium	0.49	0.040	0.010	mg/L
7440-43-9	Cadmium	0.49	0.050	0.013	mg/L
7440-70-2	Calcium	590	8.00	2.00	mg/L
7440-47-3	Chromium	0.51	0.10	0.025	mg/L
7440-48-4	Cobalt	0.49	0.10	0.025	mg/L
7440-50-8	Copper	0.72	0.20	0.050	mg/L
7439-89-6	Iron	4.67	2.00	0.50	mg/L
7439-92-1	Lead	0.46	0.15	0.038	mg/L
7439-95-4	Magnesium	1240	2.00	0.50	mg/L
7439-96-5	Manganese	0.47	0.15	0.038	mg/L
7440-02-0	Nickel	0.50	0.40	0.10	mg/L
7440-09-7	Potassium	40.4	5.00	1.25	mg/L
7782-49-2	Selenium	0.50	0.40	0.10	mg/L
7440-22-4	Silver	0.51	0.10	0.025	mg/L
7440-28-0	Thallium	0.50	0.20	0.050	mg/L
7440-62-2	Vanadium	1.18	0.20	0.050	mg/L
7440-66-6	Zinc	0.49	0.20	0.050	mg/L

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	Sodium	6460	100	25.0	mg/L

SW-846 7470A Water

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.0041	0.00020	0.000068	mg/L

SW-846 7470A Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.0045	0.00020	0.000068	mg/L

EPA 300.0 Inorganic Anions

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	123	25.0	1.00	mg/L

SW-846 8260B Water

CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	51.3	5.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	51.4	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	50.8	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	50.7	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	47.7	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	49.7	5.00	0.208	ug/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307231906	MW-08-06-MSD	Water	07/22/2013 11:00	07/23/2013 10:30

SW-846 8260B Water

CAS#	Parameter	Result	RDL	MDL	Units
563-58-6	1,1-Dichloropropene	49.0	5.00	0.052	ug/L
96-18-4	1,2,3-Trichloropropane	51.3	5.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	45.5	5.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	43.7	5.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	64.8	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	53.0	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	44.8	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	49.8	5.00	0.116	ug/L
540-59-0	1,2-Dichloroethene(Total)	97.3	10.0	0.180	ug/L
78-87-5	1,2-Dichloropropene	50.2	5.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	42.0	5.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	44.9	5.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	49.6	5.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	43.3	5.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	41.6	5.00	0.170	ug/L
78-93-3	2-Butanone	58.9	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	42.3	5.00	0.080	ug/L
591-78-6	2-Hexanone	64.7	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	45.1	5.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	41.8	5.00	0.070	ug/L
108-10-1	4-Methyl-2-pentanone	66.9	5.00	0.120	ug/L
67-64-1	Acetone	49.9	5.00	0.193	ug/L
71-43-2	Benzene	48.8	5.00	0.111	ug/L
108-86-1	Bromobenzene	42.0	5.00	0.145	ug/L
74-97-5	Bromochloromethane	53.6	5.00	0.127	ug/L
75-27-4	Bromodichloromethane	52.1	5.00	0.083	ug/L
75-25-2	Bromoform	56.6	5.00	0.215	ug/L
74-83-9	Bromomethane	45.6	5.00	0.427	ug/L
75-15-0	Carbon disulfide	47.3	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	49.0	5.00	0.248	ug/L
108-90-7	Chlorobenzene	47.2	5.00	0.083	ug/L
75-00-3	Chloroethane	33.4	5.00	0.235	ug/L
67-66-3	Chloroform	49.3	5.00	0.155	ug/L
74-87-3	Chloromethane	50.0	5.00	0.144	ug/L
124-48-1	Dibromochloromethane	53.5	5.00	0.054	ug/L
74-95-3	Dibromomethane	52.5	5.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	46.5	5.00	0.145	ug/L
100-41-4	Ethylbenzene	46.2	5.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	44.7	5.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	48.5	5.00	0.130	ug/L
74-88-4	Methyl iodide	49.3	5.00	0.084	ug/L
75-09-2	Methylene chloride	48.4	5.00	0.149	ug/L
91-20-3	Naphthalene	54.5	5.00	0.176	ug/L
100-42-5	Styrene	44.8	5.00	0.089	ug/L
127-18-4	Tetrachloroethene	49.1	5.00	0.193	ug/L
108-88-3	Toluene	47.2	5.00	0.122	ug/L
79-01-6	Trichloroethene	48.0	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	51.7	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	50.4	5.00	0.158	ug/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307231906	MW-08-06-MSD	Water	07/22/2013 11:00	07/23/2013 10:30

SW-846 8260B Water

CAS#	Parameter	Result	RDL	MDL	Units
75-01-4	Vinyl chloride	50.7	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	48.7	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	50.5	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	95.1	10.0	0.123	ug/L
104-51-8	n-Butylbenzene	41.4	5.00	0.123	ug/L
103-65-1	n-Propylbenzene	41.2	5.00	0.727	ug/L
95-47-6	o-Xylene	49.1	5.00	0.055	ug/L
135-98-8	sec-Butylbenzene	42.7	5.00	0.107	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	51.1	5.00	0.078	ug/L
98-06-6	tert-Butylbenzene	42.9	5.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	48.6	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	52.7	5.00	0.128	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	52.9	5.00	0.264	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307231907	TRIP BLANK	Water	07/22/2013 00:00	07/23/2013 10:30

SW-846 8260B Water

CAS#	Parameter	Result	RDL	MDL	Units
67-64-1	Acetone	1.32J	5.00	0.193	ug/L

GCAL ID 21307231901	Client ID S10-MW06	Matrix Water	Collect Date/Time 07/22/2013 09:00	Receive Date/Time 07/23/2013 10:30
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SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 07/25/2013 18:39	By LBH	Analytical Batch 512414
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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 21307231901	Client ID S10-MW06	Matrix Water	Collect Date/Time 07/22/2013 09:00	Receive Date/Time 07/23/2013 10:30
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SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	07/25/2013 18:39	LBH	512414

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	51.5	ug/L	103	84 - 120
1868-53-7	Dibromofluoromethane	50	50.4	ug/L	101	87 - 116
2037-26-5	Toluene d8	50	51.4	ug/L	103	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	48.9	ug/L	98	76 - 127

SW-846 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/24/2013 14:10	512290	SW-846 7470A Dissolved	1	07/25/2013 12:08	AWG	512397

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.00020	0.000068	mg/L

SW-846 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/24/2013 14:10	512290	SW-846 7470A	1	07/25/2013 12:14	AWG	512397

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.00020	0.000068	mg/L

GCAL ID 21307231901	Client ID S10-MW06	Matrix Water	Collect Date/Time 07/22/2013 09:00	Receive Date/Time 07/23/2013 10:30
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SW-846 6010C Dissolved

Prep Date 07/24/2013 13:10	Prep Batch 512143	Prep Method SW-846 3005 Dissolved	Dilution 10	Analyzed 07/26/2013 20:30	By BAM	Analytical Batch 512529
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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	439	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	0.15J	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	588	2.00	0.50	mg/L
7439-96-5	Manganese	0.19	0.15	0.038	mg/L
7440-02-0	Nickel	0.10U	0.40	0.10	mg/L
7440-09-7	Potassium	29.4	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	3210	10.0	2.50	mg/L
7440-28-0	Thallium	0.050U	0.20	0.050	mg/L
7440-62-2	Vanadium	0.45	0.20	0.050	mg/L
7440-66-6	Zinc	0.050U	0.20	0.050	mg/L

SM 2540 C - 1997

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	07/25/2013 10:50	DJH	512404

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	15000	10.0	4.39	mg/L

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			20	07/23/2013 18:45	AEL	512294

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	46.7	10.0	0.400	mg/L

GCAL ID 21307231902	Client ID S10-MW06-A	Matrix Water	Collect Date/Time 07/22/2013 09:00	Receive Date/Time 07/23/2013 10:30
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SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 07/25/2013 19:01	By CEK	Analytical Batch 512414
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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 21307231902	Client ID S10-MW06-A	Matrix Water	Collect Date/Time 07/22/2013 09:00	Receive Date/Time 07/23/2013 10:30
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SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	07/25/2013 19:01	CEK	512414

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	52.2	ug/L	104	84 - 120
1868-53-7	Dibromofluoromethane	50	51.1	ug/L	102	87 - 116
2037-26-5	Toluene d8	50	52.8	ug/L	106	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	51.4	ug/L	103	76 - 127

SW-846 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/24/2013 14:10	512290	SW-846 7470A Dissolved	1	07/25/2013 12:15	AWG	512397

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.00020	0.000068	mg/L

SW-846 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/24/2013 14:10	512290	SW-846 7470A	1	07/25/2013 12:17	AWG	512397

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.00020	0.000068	mg/L

GCAL ID 21307231902	Client ID S10-MW06-A	Matrix Water	Collect Date/Time 07/22/2013 09:00	Receive Date/Time 07/23/2013 10:30
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SW-846 6010C Dissolved

Prep Date 07/24/2013 13:10	Prep Batch 512143	Prep Method SW-846 3005 Dissolved	Dilution 10	Analyzed 07/26/2013 20:45	By BAM	Analytical Batch 512529
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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	462	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	0.15J	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	654	2.00	0.50	mg/L
7439-96-5	Manganese	0.14J	0.15	0.038	mg/L
7440-02-0	Nickel	0.10U	0.40	0.10	mg/L
7440-09-7	Potassium	31.3	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	3470	10.0	2.50	mg/L
7440-28-0	Thallium	0.050U	0.20	0.050	mg/L
7440-62-2	Vanadium	0.46	0.20	0.050	mg/L
7440-66-6	Zinc	0.050U	0.20	0.050	mg/L

SM 2540 C - 1997

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	07/25/2013 10:50	DJH	512404

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	15200	10.0	4.39	mg/L

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			20	07/23/2013 19:20	AEL	512294

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	45.7	10.0	0.400	mg/L

GCAL ID 21307231903	Client ID SD08-MW12	Matrix Water	Collect Date/Time 07/22/2013 10:20	Receive Date/Time 07/23/2013 10:30
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SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 07/25/2013 19:23	By CEK	Analytical Batch 512414
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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 21307231903	Client ID SD08-MW12	Matrix Water	Collect Date/Time 07/22/2013 10:20	Receive Date/Time 07/23/2013 10:30
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SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	07/25/2013 19:23	CEK	512414

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	53.2	ug/L	106	84 - 120
1868-53-7	Dibromofluoromethane	50	49.9	ug/L	100	87 - 116
2037-26-5	Toluene d8	50	52.5	ug/L	105	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	49.5	ug/L	99	76 - 127

SW-846 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/24/2013 14:10	512290	SW-846 7470A Dissolved	1	07/25/2013 12:19	AWG	512397

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.00020	0.000068	mg/L

SW-846 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/24/2013 14:10	512290	SW-846 7470A	1	07/25/2013 12:21	AWG	512397

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.00020	0.000068	mg/L

GCAL ID 21307231903	Client ID SD08-MW12	Matrix Water	Collect Date/Time 07/22/2013 10:20	Receive Date/Time 07/23/2013 10:30
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SW-846 6010C Dissolved

Prep Date 07/24/2013 13:10	Prep Batch 512143	Prep Method SW-846 3005 Dissolved	Dilution 100	Analyzed 07/26/2013 18:29	By BAM	Analytical Batch 512529
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CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	Sodium	14300	100	25.0	mg/L

SW-846 6010C Dissolved

Prep Date 07/24/2013 13:10	Prep Batch 512143	Prep Method SW-846 3005 Dissolved	Dilution 10	Analyzed 07/26/2013 21:00	By BAM	Analytical Batch 512529
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CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	0.50J	2.00	0.50	mg/L
7440-36-0	Antimony	0.15U	0.60	0.15	mg/L
7440-38-2	Arsenic	0.064J	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	753	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	0.24	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	3520	2.00	0.50	mg/L
7439-96-5	Manganese	0.069J	0.15	0.038	mg/L
7440-02-0	Nickel	0.10U	0.40	0.10	mg/L
7440-09-7	Potassium	85.3	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	0.83	0.20	0.050	mg/L
7440-66-6	Zinc	0.050U	0.20	0.050	mg/L

SM 2540 C - 1997

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 07/23/2013 16:15	By JEM	Analytical Batch 512286
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CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	69700	10.0	4.39	mg/L

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution 100	Analyzed 07/23/2013 19:54	By AEL	Analytical Batch 512294
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CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	4.95J	50.0	2.00	mg/L

GCAL ID 21307231904	Client ID MW-08-06	Matrix Water	Collect Date/Time 07/22/2013 11:00	Receive Date/Time 07/23/2013 10:30
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SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 07/25/2013 12:48	By LBH	Analytical Batch 512414
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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	0.784J	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 21307231904	Client ID MW-08-06	Matrix Water	Collect Date/Time 07/22/2013 11:00	Receive Date/Time 07/23/2013 10:30
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SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	07/25/2013 12:48	LBH	512414

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	51.6	ug/L	103	84 - 120
1868-53-7	Dibromofluoromethane	50	51.4	ug/L	103	87 - 116
2037-26-5	Toluene d8	50	51.4	ug/L	103	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	51.6	ug/L	103	76 - 127

SW-846 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/24/2013 14:10	512290	SW-846 7470A Dissolved	1	07/25/2013 11:56	AWG	512397

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.00020	0.000068	mg/L

SW-846 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/24/2013 14:10	512290	SW-846 7470A	1	07/25/2013 11:58	AWG	512397

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.00020	0.000068	mg/L

GCAL ID 21307231904	Client ID MW-08-06	Matrix Water	Collect Date/Time 07/22/2013 11:00	Receive Date/Time 07/23/2013 10:30
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SW-846 6010C Dissolved

Prep Date 07/24/2013 13:10	Prep Batch 512143	Prep Method SW-846 3005 Dissolved	Dilution 10	Analyzed 07/25/2013 16:05	By BAM	Analytical Batch 512445
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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	583	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	0.19J	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	1230	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	31.0	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	0.65	0.20	0.050	mg/L
7440-66-6	Zinc	0.050U	0.20	0.050	mg/L

SW-846 6010C Dissolved

Prep Date 07/24/2013 13:10	Prep Batch 512143	Prep Method SW-846 3005 Dissolved	Dilution 100	Analyzed 07/26/2013 17:12	By BAM	Analytical Batch 512529
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CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	Sodium	6430	100	25.0	mg/L

SM 2540 C - 1997

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 07/23/2013 16:15	By JEM	Analytical Batch 512286
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CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	25300	10.0	4.39	mg/L

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution 50	Analyzed 07/23/2013 21:56	By AEL	Analytical Batch 512294
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CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	13.2J	25.0	1.00	mg/L

GCAL ID 21307231905	Client ID MW-08-06-MS	Matrix Water	Collect Date/Time 07/22/2013 11:00	Receive Date/Time 07/23/2013 10:30
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SW-846 8260B Water

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 07/25/2013 16:26	By LBH	Analytical Batch 512414
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CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	51.6	5.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	50.1	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	53.8	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	50.6	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	46.9	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	50.9	5.00	0.208	ug/L
563-58-6	1,1-Dichloropropene	48.6	5.00	0.052	ug/L
96-18-4	1,2,3-Trichloropropane	53.8	5.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	48.4	5.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	45.7	5.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	68.3	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	53.6	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	47.3	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	49.7	5.00	0.116	ug/L
540-59-0	1,2-Dichloroethene(Total)	95.3	10.0	0.180	ug/L
78-87-5	1,2-Dichloropropane	50.1	5.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	44.1	5.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	47.7	5.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	49.3	5.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	45.7	5.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	44.8	5.00	0.170	ug/L
78-93-3	2-Butanone	55.6	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	44.9	5.00	0.080	ug/L
591-78-6	2-Hexanone	65.3	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	48.0	5.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	44.7	5.00	0.070	ug/L
108-10-1	4-Methyl-2-pentanone	66.4	5.00	0.120	ug/L
67-64-1	Acetone	46.0	5.00	0.193	ug/L
71-43-2	Benzene	48.6	5.00	0.111	ug/L
108-86-1	Bromobenzene	44.8	5.00	0.145	ug/L
74-97-5	Bromochloromethane	52.2	5.00	0.127	ug/L
75-27-4	Bromodichloromethane	51.5	5.00	0.083	ug/L
75-25-2	Bromoform	56.0	5.00	0.215	ug/L
74-83-9	Bromomethane	44.7	5.00	0.427	ug/L
75-15-0	Carbon disulfide	47.4	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	48.6	5.00	0.248	ug/L
108-90-7	Chlorobenzene	47.9	5.00	0.083	ug/L
75-00-3	Chloroethane	32.7	5.00	0.235	ug/L
67-66-3	Chloroform	48.7	5.00	0.155	ug/L
74-87-3	Chloromethane	51.8	5.00	0.144	ug/L
124-48-1	Dibromochloromethane	53.0	5.00	0.054	ug/L
74-95-3	Dibromomethane	51.8	5.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	46.2	5.00	0.145	ug/L
100-41-4	Ethylbenzene	46.8	5.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	47.9	5.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	48.0	5.00	0.130	ug/L
74-88-4	Methyl iodide	54.6	5.00	0.084	ug/L
75-09-2	Methylene chloride	47.6	5.00	0.149	ug/L
91-20-3	Naphthalene	56.5	5.00	0.176	ug/L
100-42-5	Styrene	44.7	5.00	0.089	ug/L

GCAL ID 21307231905	Client ID MW-08-06-MS	Matrix Water	Collect Date/Time 07/22/2013 11:00	Receive Date/Time 07/23/2013 10:30
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SW-846 8260B Water

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	07/25/2013 16:26	LBH	512414

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	50.0	5.00	0.193	ug/L
108-88-3	Toluene	49.0	5.00	0.122	ug/L
79-01-6	Trichloroethene	49.5	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	52.4	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	51.1	5.00	0.158	ug/L
75-01-4	Vinyl chloride	51.3	5.00	0.127	ug/L
1330-20-7	Xylene (total)	143	15.0	0.179	ug/L
156-59-2	cis-1,2-Dichloroethene	47.7	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	50.8	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	95.8	10.0	0.123	ug/L
104-51-8	n-Butylbenzene	43.7	5.00	0.123	ug/L
103-65-1	n-Propylbenzene	44.5	5.00	0.727	ug/L
95-47-6	o-Xylene	47.6	5.00	0.055	ug/L
135-98-8	sec-Butylbenzene	46.3	5.00	0.107	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	49.7	5.00	0.078	ug/L
98-06-6	tert-Butylbenzene	46.0	5.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	47.6	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	52.3	5.00	0.128	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	55.5	5.00	0.264	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	53.7	ug/L	107	84 - 120
1868-53-7	Dibromofluoromethane	50	50.8	ug/L	102	87 - 116
2037-26-5	Toluene d8	50	50.7	ug/L	101	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	49	ug/L	98	76 - 127

SW-846 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/24/2013 14:10	512290	SW-846 7470A Dissolved	1	07/25/2013 11:59	AWG	512397

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.0046	0.00020	0.000068	mg/L

SW-846 7470A Water

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/24/2013 14:10	512290	SW-846 7470A	1	07/25/2013 12:01	AWG	512397

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.0040	0.00020	0.000068	mg/L

GCAL ID 21307231905	Client ID MW-08-06-MS	Matrix Water	Collect Date/Time 07/22/2013 11:00	Receive Date/Time 07/23/2013 10:30
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SW-846 6010C Dissolved

Prep Date 07/24/2013 13:10	Prep Batch 512143	Prep Method SW-846 3005 Dissolved	Dilution 10	Analyzed 07/25/2013 16:12	By BAM	Analytical Batch 512445
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CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	5.00	2.00	0.50	mg/L
7440-36-0	Antimony	0.53J	0.60	0.15	mg/L
7440-38-2	Arsenic	0.56	0.20	0.050	mg/L
7440-39-3	Barium	0.53	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	602	8.00	2.00	mg/L
7440-47-3	Chromium	0.51	0.10	0.025	mg/L
7440-48-4	Cobalt	0.49	0.10	0.025	mg/L
7440-50-8	Copper	0.71	0.20	0.050	mg/L
7439-89-6	Iron	4.75	2.00	0.50	mg/L
7439-92-1	Lead	0.47	0.15	0.038	mg/L
7439-95-4	Magnesium	1260	2.00	0.50	mg/L
7439-96-5	Manganese	0.47	0.15	0.038	mg/L
7440-02-0	Nickel	0.51	0.40	0.10	mg/L
7440-09-7	Potassium	41.0	5.00	1.25	mg/L
7782-49-2	Selenium	0.52	0.40	0.10	mg/L
7440-22-4	Silver	0.51	0.10	0.025	mg/L
7440-28-0	Thallium	0.51	0.20	0.050	mg/L
7440-62-2	Vanadium	1.17	0.20	0.050	mg/L
7440-66-6	Zinc	0.49	0.20	0.050	mg/L

SW-846 6010C Dissolved

Prep Date 07/24/2013 13:10	Prep Batch 512143	Prep Method SW-846 3005 Dissolved	Dilution 100	Analyzed 07/26/2013 17:20	By BAM	Analytical Batch 512529
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CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	Sodium	6630	100	25.0	mg/L

EPA 300.0 Inorganic Anions

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			50	07/23/2013 22:14	AEL	512294

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	127	25.0	1.00	mg/L

GCAL ID 21307231906	Client ID MW-08-06-MSD	Matrix Water	Collect Date/Time 07/22/2013 11:00	Receive Date/Time 07/23/2013 10:30
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SW-846 8260B Water

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 07/25/2013 16:48	By LBH	Analytical Batch 512414
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CAS#	Parameter	Result	RDL	MDL	Units
630-20-6	1,1,1,2-Tetrachloroethane	51.3	5.00	0.120	ug/L
71-55-6	1,1,1-Trichloroethane	51.4	5.00	0.123	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	50.8	5.00	0.109	ug/L
79-00-5	1,1,2-Trichloroethane	50.7	5.00	0.159	ug/L
75-34-3	1,1-Dichloroethane	47.7	5.00	0.171	ug/L
75-35-4	1,1-Dichloroethene	49.7	5.00	0.208	ug/L
563-58-6	1,1-Dichloropropene	49.0	5.00	0.052	ug/L
96-18-4	1,2,3-Trichloropropane	51.3	5.00	0.065	ug/L
120-82-1	1,2,4-Trichlorobenzene	45.5	5.00	0.105	ug/L
95-63-6	1,2,4-Trimethylbenzene	43.7	5.00	0.084	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	64.8	5.00	0.194	ug/L
106-93-4	1,2-Dibromoethane	53.0	5.00	0.102	ug/L
95-50-1	1,2-Dichlorobenzene	44.8	5.00	0.135	ug/L
107-06-2	1,2-Dichloroethane	49.8	5.00	0.116	ug/L
540-59-0	1,2-Dichloroethene(Total)	97.3	10.0	0.180	ug/L
78-87-5	1,2-Dichloropropane	50.2	5.00	0.150	ug/L
108-67-8	1,3,5-Trimethylbenzene	42.0	5.00	0.066	ug/L
541-73-1	1,3-Dichlorobenzene	44.9	5.00	0.138	ug/L
142-28-9	1,3-Dichloropropane	49.6	5.00	0.059	ug/L
106-46-7	1,4-Dichlorobenzene	43.3	5.00	0.083	ug/L
594-20-7	2,2-Dichloropropane	41.6	5.00	0.170	ug/L
78-93-3	2-Butanone	58.9	5.00	0.142	ug/L
95-49-8	2-Chlorotoluene	42.3	5.00	0.080	ug/L
591-78-6	2-Hexanone	64.7	5.00	0.122	ug/L
106-43-4	4-Chlorotoluene	45.1	5.00	0.124	ug/L
99-87-6	4-Isopropyltoluene	41.8	5.00	0.070	ug/L
108-10-1	4-Methyl-2-pentanone	66.9	5.00	0.120	ug/L
67-64-1	Acetone	49.9	5.00	0.193	ug/L
71-43-2	Benzene	48.8	5.00	0.111	ug/L
108-86-1	Bromobenzene	42.0	5.00	0.145	ug/L
74-97-5	Bromochloromethane	53.6	5.00	0.127	ug/L
75-27-4	Bromodichloromethane	52.1	5.00	0.083	ug/L
75-25-2	Bromoform	56.6	5.00	0.215	ug/L
74-83-9	Bromomethane	45.6	5.00	0.427	ug/L
75-15-0	Carbon disulfide	47.3	5.00	0.190	ug/L
56-23-5	Carbon tetrachloride	49.0	5.00	0.248	ug/L
108-90-7	Chlorobenzene	47.2	5.00	0.083	ug/L
75-00-3	Chloroethane	33.4	5.00	0.235	ug/L
67-66-3	Chloroform	49.3	5.00	0.155	ug/L
74-87-3	Chloromethane	50.0	5.00	0.144	ug/L
124-48-1	Dibromochloromethane	53.5	5.00	0.054	ug/L
74-95-3	Dibromomethane	52.5	5.00	0.211	ug/L
75-71-8	Dichlorodifluoromethane	46.5	5.00	0.145	ug/L
100-41-4	Ethylbenzene	46.2	5.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	44.7	5.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	48.5	5.00	0.130	ug/L
74-88-4	Methyl iodide	49.3	5.00	0.084	ug/L
75-09-2	Methylene chloride	48.4	5.00	0.149	ug/L
91-20-3	Naphthalene	54.5	5.00	0.176	ug/L
100-42-5	Styrene	44.8	5.00	0.089	ug/L

GCAL ID 21307231906	Client ID MW-08-06-MSD	Matrix Water	Collect Date/Time 07/22/2013 11:00	Receive Date/Time 07/23/2013 10:30
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SW-846 8260B Water

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	07/25/2013 16:48	LBH	512414

CAS#	Parameter	Result	RDL	MDL	Units
127-18-4	Tetrachloroethene	49.1	5.00	0.193	ug/L
108-88-3	Toluene	47.2	5.00	0.122	ug/L
79-01-6	Trichloroethene	48.0	5.00	0.161	ug/L
75-69-4	Trichlorofluoromethane	51.7	5.00	0.157	ug/L
76-13-1	Trichlorotrifluoroethane	50.4	5.00	0.158	ug/L
75-01-4	Vinyl chloride	50.7	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	48.7	5.00	0.103	ug/L
10061-01-5	cis-1,3-Dichloropropene	50.5	5.00	0.124	ug/L
136777-61-2	m,p-Xylene	95.1	10.0	0.123	ug/L
104-51-8	n-Butylbenzene	41.4	5.00	0.123	ug/L
103-65-1	n-Propylbenzene	41.2	5.00	0.727	ug/L
95-47-6	o-Xylene	49.1	5.00	0.055	ug/L
135-98-8	sec-Butylbenzene	42.7	5.00	0.107	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	51.1	5.00	0.078	ug/L
98-06-6	tert-Butylbenzene	42.9	5.00	0.087	ug/L
156-60-5	trans-1,2-Dichloroethene	48.6	5.00	0.077	ug/L
10061-02-6	trans-1,3-Dichloropropene	52.7	5.00	0.128	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	52.9	5.00	0.264	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	55.9	ug/L	112	84 - 120
1868-53-7	Dibromofluoromethane	50	52.5	ug/L	105	87 - 116
2037-26-5	Toluene d8	50	50.8	ug/L	102	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	51.4	ug/L	103	76 - 127

SW-846 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/24/2013 14:10	512290	SW-846 7470A Dissolved	1	07/25/2013 12:03	AWG	512397

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.0045	0.00020	0.000068	mg/L

SW-846 7470A Water

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/24/2013 14:10	512290	SW-846 7470A	1	07/25/2013 12:05	AWG	512397

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.0041	0.00020	0.000068	mg/L

GCAL ID 21307231906	Client ID MW-08-06-MSD	Matrix Water	Collect Date/Time 07/22/2013 11:00	Receive Date/Time 07/23/2013 10:30
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SW-846 6010C Dissolved

Prep Date 07/24/2013 13:10	Prep Batch 512143	Prep Method SW-846 3005 Dissolved	Dilution 10	Analyzed 07/25/2013 16:19	By BAM	Analytical Batch 512445
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CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	5.24	2.00	0.50	mg/L
7440-36-0	Antimony	0.54J	0.60	0.15	mg/L
7440-38-2	Arsenic	0.52	0.20	0.050	mg/L
7440-39-3	Barium	0.53	0.10	0.025	mg/L
7440-41-7	Beryllium	0.49	0.040	0.010	mg/L
7440-43-9	Cadmium	0.49	0.050	0.013	mg/L
7440-70-2	Calcium	590	8.00	2.00	mg/L
7440-47-3	Chromium	0.51	0.10	0.025	mg/L
7440-48-4	Cobalt	0.49	0.10	0.025	mg/L
7440-50-8	Copper	0.72	0.20	0.050	mg/L
7439-89-6	Iron	4.67	2.00	0.50	mg/L
7439-92-1	Lead	0.46	0.15	0.038	mg/L
7439-95-4	Magnesium	1240	2.00	0.50	mg/L
7439-96-5	Manganese	0.47	0.15	0.038	mg/L
7440-02-0	Nickel	0.50	0.40	0.10	mg/L
7440-09-7	Potassium	40.4	5.00	1.25	mg/L
7782-49-2	Selenium	0.50	0.40	0.10	mg/L
7440-22-4	Silver	0.51	0.10	0.025	mg/L
7440-28-0	Thallium	0.50	0.20	0.050	mg/L
7440-62-2	Vanadium	1.18	0.20	0.050	mg/L
7440-66-6	Zinc	0.49	0.20	0.050	mg/L

SW-846 6010C Dissolved

Prep Date 07/24/2013 13:10	Prep Batch 512143	Prep Method SW-846 3005 Dissolved	Dilution 100	Analyzed 07/26/2013 17:27	By BAM	Analytical Batch 512529
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CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	Sodium	6460	100	25.0	mg/L

EPA 300.0 Inorganic Anions

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			50	07/23/2013 22:31	AEL	512294

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	123	25.0	1.00	mg/L

GCAL ID 21307231907	Client ID TRIP BLANK	Matrix Water	Collect Date/Time 07/22/2013 00:00	Receive Date/Time 07/23/2013 10:30
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SW-846 8260B Water

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 07/25/2013 19:45	By CEK	Analytical Batch 512414
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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	1.32J	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 21307231907	Client ID TRIP BLANK	Matrix Water	Collect Date/Time 07/22/2013 00:00	Receive Date/Time 07/23/2013 10:30
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SW-846 8260B Water

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 07/25/2013 19:45	By CEK	Analytical Batch 512414
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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	52.5	ug/L	105	84 - 120
1868-53-7	Dibromofluoromethane	50	50.8	ug/L	102	87 - 116
2037-26-5	Toluene d8	50	52.1	ug/L	104	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	50.1	ug/L	100	76 - 127

GC/MS Volatiles Quality Control Summary

Analytical Batch 512414 Prep Batch N/A		Client ID MB512414 GCAL ID 1217152 Sample Type Method Blank Analytical Date 07/25/2013 11:21 Matrix Water		LCS512414 1217153 LCS 07/25/2013 09:14 Water			LCSD512414 1217154 LCSD 07/25/2013 09:37 Water				
SW-846 8260B		Units	ug/L	Spike	Result	% R	Control	Result	% R	RPD	RPD
		Result	RDL	Added			Limits % R				Limit
67-64-1	Acetone	0.193U	0.193	50.0	53.4	107	59 - 134	49.9	100	7	30
74-97-5	Bromochloromethane	0.127U	0.127	50.0	55.2	110	78 - 112	54.4	109	1	30
75-27-4	Bromodichloromethane	0.083U	0.083	50.0	51.0	102	76 - 116	52.6	105	3	30
75-25-2	Bromoform	0.215U	0.215	50.0	55.0	110	68 - 128	53.3	107	3	30
74-83-9	Bromomethane	0.427U	0.427	50.0	42.9	86	55 - 151	44.4	89	3	30
75-15-0	Carbon disulfide	0.190U	0.190	50.0	45.9	92	67 - 147	47.4	95	3	30
56-23-5	Carbon tetrachloride	0.248U	0.248	50.0	49.2	98	74 - 139	48.6	97	1	30
75-00-3	Chloroethane	0.235U	0.235	50.0	47.7	95	54 - 166	48.0	96	1	30
136777-61-2	m,p-Xylene	0.123U	0.123	100	101	101	83 - 121	102	102	1	30
67-66-3	Chloroform	0.155U	0.155	50.0	49.6	99	85 - 123	49.3	99	1	30
74-87-3	Chloromethane	0.144U	0.144	50.0	53.5	107	55 - 173	56.4	113	5	30
124-48-1	Dibromochloromethane	0.054U	0.054	50.0	54.1	108	74 - 116	53.9	108	0	30
74-95-3	Dibromomethane	0.211U	0.211	50.0	51.6	103	81 - 116	52.1	104	1	30
75-71-8	Dichlorodifluoromethane	0.145U	0.145	50.0	48.0	96	34 - 158	49.5	99	3	30
75-34-3	1,1-Dichloroethane	0.171U	0.171	50.0	49.6	99	82 - 127	48.6	97	2	30
107-08-2	1,2-Dichloroethane	0.116U	0.116	50.0	51.1	102	76 - 122	49.5	99	3	30
156-59-2	cis-1,2-Dichloroethene	0.103U	0.103	50.0	49.7	99	81 - 114	48.9	98	2	30
156-60-5	trans-1,2-Dichloroethene	0.077U	0.077	50.0	49.2	98	82 - 126	49.9	100	1	30
75-09-2	Methylene chloride	0.149U	0.149	50.0	50.0	100	69 - 125	49.3	99	1	30
78-87-5	1,2-Dichloropropane	0.150U	0.150	50.0	51.3	103	81 - 120	52.8	106	3	30
10061-01-5	cis-1,3-Dichloropropene	0.124U	0.124	50.0	50.8	102	83 - 119	52.8	106	4	30
10061-02-6	trans-1,3-Dichloropropene	0.128U	0.128	50.0	52.6	105	87 - 123	53.9	108	2	30
100-41-4	Ethylbenzene	0.109U	0.109	50.0	50.8	102	87 - 118	49.7	99	2	30
591-78-6	2-Hexanone	0.122U	0.122	50.0	50.7	101	58 - 125	48.7	97	4	30
98-82-8	Isopropylbenzene (Cumene)	0.130U	0.130	50.0	52.5	105	87 - 131	51.4	103	2	30
78-93-3	2-Butanone	0.142U	0.142	50.0	52.5	105	61 - 127	51.0	102	3	30
74-88-4	Methyl iodide	0.084U	0.084	50.0	52.3	105	72 - 125	55.1	110	5	30
108-10-1	4-Methyl-2-pentanone	0.120U	0.120	50.0	51.3	103	62 - 125	49.4	99	4	30
103-65-1	n-Propylbenzene	0.727U	0.727	50.0	48.0	96	86 - 125	47.5	95	1	30
100-42-5	Styrene	0.089U	0.089	50.0	52.2	104	78 - 118	51.3	103	2	30
127-18-4	Tetrachloroethene	0.193U	0.193	50.0	52.4	105	80 - 131	54.0	108	3	30
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	0.120	50.0	53.7	107	81 - 119	53.2	106	1	30
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	0.109	50.0	47.4	95	71 - 120	46.8	94	1	30

GC/MS Volatiles Quality Control Summary

Analytical Batch 512414 Prep Batch N/A		Client ID MB512414 GCAL ID 1217152 Sample Type Method Blank Analytical Date 07/25/2013 11:21 Matrix Water		LCS512414 1217153 LCS 07/25/2013 09:14 Water			LCS512414 1217154 LCS 07/25/2013 09:37 Water				
SW-846 8260B		Units	ug/L	Spike	Result	% R	Control	Result	% R	RPD	RPD
		Result	RDL	Added			Limits % R				Limit
120-82-1	1,2,4-Trichlorobenzene	0.105U	0.105	50.0	51.9	104	68 - 123	53.3	107	3	30
71-55-6	1,1,1-Trichloroethane	0.123U	0.123	50.0	51.4	103	79 - 133	51.9	104	1	30
79-00-5	1,1,2-Trichloroethane	0.159U	0.159	50.0	51.3	103	80 - 114	51.1	102	0	30
75-69-4	Trichlorofluoromethane	0.157U	0.157	50.0	50.2	100	66 - 156	51.7	103	3	30
96-18-4	1,2,3-Trichloropropane	0.065U	0.065	50.0	49.0	98	77 - 115	47.8	96	2	30
95-63-6	1,2,4-Trimethylbenzene	0.084U	0.084	50.0	48.7	97	82 - 120	50.2	100	3	30
108-67-8	1,3,5-Trimethylbenzene	0.066U	0.066	50.0	47.4	95	83 - 123	47.8	96	1	30
75-01-4	Vinyl chloride	0.127U	0.127	50.0	49.4	99	57 - 153	50.3	101	2	30
95-47-6	o-Xylene	0.055U	0.055	50.0	51.5	103	83 - 121	50.7	101	2	30
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	0.194	50.0	53.1	106	61 - 118	52.0	104	2	30
106-93-4	1,2-Dibromoethane	0.102U	0.102	50.0	51.7	103	80 - 115	51.5	103	0	30
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	0.078	50.0	50.6	101	75 - 116	49.5	99	2	30
540-59-0	1,2-Dichloroethene(Total)	0.180U	0.180	100	98.9	99	74 - 128	98.8	99	0	30
99-87-6	4-Isopropyltoluene	0.070U	0.070	50.0	49.5	99	83 - 125	50.8	102	3	30
1330-20-7	Xylene (total)	0.179U	0.179	150	153	102	74 - 127	162	101	1	30
110-57-6	trans-1,4-Dichloro-2-butene	0.264U	0.264	50.0	51.0	102	51 - 137	48.9	98	4	30
594-20-7	2,2-Dichloropropane	0.170U	0.170	50.0	52.5	105	77 - 138	53.4	107	2	30
76-13-1	Trichlorotrifluoroethane	0.158U	0.158	50.0	50.0	100	74 - 139	52.8	106	5	30
563-58-6	1,1-Dichloropropene	0.052U	0.052	50.0	50.4	101	87 - 127	50.6	101	0	30
142-28-9	1,3-Dichloropropane	0.059U	0.059	50.0	50.3	101	81 - 113	50.0	100	1	30
108-86-1	Bromobenzene	0.145U	0.145	50.0	47.3	95	83 - 115	46.1	92	3	30
95-49-8	2-Chlorotoluene	0.080U	0.080	50.0	46.8	94	81 - 121	47.1	94	1	30
106-43-4	4-Chlorotoluene	0.124U	0.124	50.0	49.6	99	84 - 120	49.6	99	0	30
98-06-6	tert-Butylbenzene	0.087U	0.087	50.0	49.3	99	83 - 126	48.5	97	2	30
135-98-8	sec-Butylbenzene	0.107U	0.107	50.0	50.2	100	86 - 127	51.6	103	3	30
541-73-1	1,3-Dichlorobenzene	0.138U	0.138	50.0	49.7	99	86 - 115	51.1	102	3	30
106-46-7	1,4-Dichlorobenzene	0.083U	0.083	50.0	48.1	96	87 - 113	49.1	98	2	30
104-51-8	n-Butylbenzene	0.123U	0.123	50.0	48.7	97	84 - 124	50.0	100	3	30
95-50-1	1,2-Dichlorobenzene	0.135U	0.135	50.0	50.2	100	85 - 115	49.6	99	1	30
87-68-3	Hexachlorobutadiene	0.265U	0.265	50.0	53.9	108	71 - 133	55.8	112	3	30
91-20-3	Naphthalene	0.176U	0.176	50.0	53.7	107	59 - 125	51.7	103	4	35
75-35-4	1,1-Dichloroethene	0.208U	0.208	50.0	48.5	97	75 - 133	49.3	99	2	20
71-43-2	Benzene	0.111U	0.111	50.0	49.5	99	83 - 124	49.8	100	1	20

GC/MS Volatiles Quality Control Summary

Analytical Batch 512414 Prep Batch N/A		Client ID MB512414 GCAL ID 1217152 Sample Type Method Blank Analytical Date 07/25/2013 11:21 Matrix Water		LCS512414 1217153 LCS 07/25/2013 09:14 Water			LCSD512414 1217154 LCSD 07/25/2013 09:37 Water				
SW-846 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	51.6	103	85 - 124	51.5	103	0	20
108-88-3	Toluene	0.122U	0.122	50.0	48.7	97	86 - 116	49.4	99	1	20
108-90-7	Chlorobenzene	0.083U	0.083	50.0	50.5	101	87 - 115	49.6	99	2	20
Surrogate											
460-00-4	4-Bromofluorobenzene	53.4	107	50	55.7	111	84 - 120	53.6	107		
1868-53-7	Dibromofluoromethane	50.8	102	50	49.9	100	87 - 116	50.7	101		
2037-26-5	Toluene d8	52.5	105	50	49.2	98	86 - 112	50.3	101		
17060-07-0	1,2-Dichloroethane-d4	49.3	99	50	49.5	99	76 - 127	49.8	100		

Analytical Batch 512414 Prep Batch N/A		Client ID MW-08-06 GCAL ID 21307231904 Sample Type SAMPLE Analytical Date 07/25/2013 12:48 Matrix Water		MW-08-06-MS 21307231905 MS 07/25/2013 16:26 Water			MW-08-06-MSD 21307231906 MSD 07/25/2013 16:48 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	51.6	103	81 - 119	51.3	103	1	10
71-55-6	1,1,1-Trichloroethane	0.00	0.123	50.0	50.1	100	79 - 133	51.4	103	3	11
79-34-5	1,1,2,2-Tetrachloroethane	0.00	0.109	50.0	53.8	108	71 - 120	50.8	102	6	11
79-00-5	1,1,2-Trichloroethane	0.00	0.159	50.0	50.6	101	80 - 114	50.7	101	0	11
75-34-3	1,1-Dichloroethane	0.00	0.171	50.0	46.9	94	82 - 127	47.7	95	2	10
75-35-4	1,1-Dichloroethene	0.00	0.208	50.0	50.9	102	75 - 133	49.7	99	2	13
563-58-6	1,1-Dichloropropene	0.00	0.052	50.0	48.6	97	87 - 127	49.0	98	1	10
96-18-4	1,2,3-Trichloropropane	0.00	0.065	50.0	53.8	108	77 - 115	51.3	103	5	12
120-82-1	1,2,4-Trichlorobenzene	0.00	0.105	50.0	48.4	97	68 - 123	45.5	91	6	11
95-63-6	1,2,4-Trimethylbenzene	0.00	0.084	50.0	45.7	91	82 - 120	43.7	87	4	10
96-12-8	1,2-Dibromo-3-chloropropane	0.00	0.194	50.0	68.3	137*	61 - 118	64.8	130*	5	15
106-93-4	1,2-Dibromoethane	0.00	0.102	50.0	53.6	107	80 - 115	53.0	106	1	10
95-50-1	1,2-Dichlorobenzene	0.00	0.135	50.0	47.3	95	85 - 115	44.8	90	5	9
107-06-2	1,2-Dichloroethane	0.00	0.116	50.0	49.7	99	76 - 122	49.8	100	0	11
540-59-0	1,2-Dichloroethene(Total)	0.00	0.180	100	95.3	95	74 - 128	97.3	97	2	30
78-87-5	1,2-Dichloropropane	0.00	0.150	50.0	50.1	100	81 - 120	50.2	100	0	11

GC/MS Volatiles Quality Control Summary

Analytical Batch 512414 Prep Batch N/A		Client ID GCAL ID 21307231904 Sample Type SAMPLE Analytical Date 07/25/2013 12:48 Matrix Water		MW-08-06-MS 21307231905 MS 07/25/2013 16:26 Water			MW-08-06-MSD 21307231906 MSD 07/25/2013 16:48 Water				
SW-846 8260B Water		Units Result	ug/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	RPD Limit
108-67-8	1,3,5-Trimethylbenzene	0.00	0.066	50.0	44.1	88	83 - 123	42.0	84	5	10
541-73-1	1,3-Dichlorobenzene	0.00	0.138	50.0	47.7	95	86 - 115	44.9	90	6	9
142-28-9	1,3-Dichloropropane	0.00	0.059	50.0	49.3	99	81 - 113	49.6	99	1	11
106-46-7	1,4-Dichlorobenzene	0.00	0.083	50.0	45.7	91	87 - 113	43.3	87	5	10
594-20-7	2,2-Dichloropropane	0.00	0.170	50.0	44.8	90	77 - 138	41.6	83	7	12
78-93-3	2-Butanone	0.00	0.142	50.0	55.6	111	61 - 127	58.9	118	6	13
95-49-8	2-Chlorotoluene	0.00	0.080	50.0	44.9	90	81 - 121	42.3	85	6	10
591-78-6	2-Hexanone	0.00	0.122	50.0	65.3	131*	58 - 125	64.7	129*	1	14
106-43-4	4-Chlorotoluene	0.00	0.124	50.0	48.0	96	84 - 120	45.1	90	6	10
99-87-6	4-Isopropyltoluene	0.00	0.070	50.0	44.7	89	83 - 125	41.8	84	7	9
108-10-1	4-Methyl-2-pentanone	0.00	0.120	50.0	66.4	133*	62 - 125	66.9	134*	1	13
67-64-1	Acetone	0.00	0.193	50.0	46.0	92	59 - 134	49.9	100	8	14
71-43-2	Benzene	0.00	0.111	50.0	48.6	97	83 - 124	48.8	98	0	11
108-86-1	Bromobenzene	0.00	0.145	50.0	44.8	90	83 - 115	42.0	84	6	10
74-97-5	Bromochloromethane	0.00	0.127	50.0	52.2	104	78 - 112	53.6	107	3	10
75-27-4	Bromodichloromethane	0.00	0.083	50.0	51.5	103	76 - 116	52.1	104	1	10
75-25-2	Bromoforn	0.00	0.215	50.0	56.0	112	68 - 128	56.6	113	1	11
74-83-9	Bromomethane	0.00	0.427	50.0	44.7	89	55 - 151	45.6	91	2	21
75-15-0	Carbon disulfide	0.00	0.190	50.0	47.4	95	67 - 147	47.3	95	0	12
56-23-5	Carbon tetrachloride	0.00	0.248	50.0	48.6	97	74 - 139	49.0	98	1	13
108-90-7	Chlorobenzene	0.00	0.083	50.0	47.9	96	87 - 115	47.2	94	1	9
75-00-3	Chloroethane	0.00	0.235	50.0	32.7	65	54 - 166	33.4	67	2	20
67-66-3	Chloroform	0.784	0.155	50.0	48.7	96	85 - 123	49.3	97	1	10
74-87-3	Chloromethane	0.00	0.144	50.0	51.8	104	55 - 173	50.0	100	4	22
124-48-1	Dibromochloromethane	0.00	0.054	50.0	53.0	106	74 - 116	53.5	107	1	11
74-95-3	Dibromomethane	0.00	0.211	50.0	51.8	104	81 - 116	52.5	105	1	10
75-71-8	Dichlorodifluoromethane	0.00	0.145	50.0	46.2	92	34 - 158	46.5	93	1	22
100-41-4	Ethylbenzene	0.00	0.109	50.0	46.8	94	87 - 118	46.2	92	1	10
87-68-3	Hexachlorobutadiene	0.00	0.265	50.0	47.9	96	71 - 133	44.7	89	7	12
98-82-8	Isopropylbenzene (Cumene)	0.00	0.130	50.0	48.0	96	87 - 131	48.5	97	1	10
74-88-4	Methyl iodide	0.00	0.084	50.0	54.6	109	72 - 125	49.3	99	10	11
75-09-2	Methylene chloride	0.00	0.149	50.0	47.6	95	69 - 125	48.4	97	2	11
91-20-3	Naphthalene	0.00	0.176	50.0	56.5	113	59 - 125	54.5	109	4	15

GC/MS Volatiles Quality Control Summary

Analytical Batch 512414 Prep Batch N/A		Client ID GCAL ID 21307231904 Sample Type SAMPLE Analytical Date 07/25/2013 12:48 Matrix Water		MW-08-06-MS 21307231905 MS 07/25/2013 16:26 Water			MW-08-06-MSD 21307231906 MSD 07/25/2013 16:48 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	44.7	89	78 - 118	44.8	90	0	11		
127-18-4	Tetrachloroethene	0.00	0.193	50.0	50.0	100	80 - 131	49.1	98	2	12		
108-88-3	Toluene	0.00	0.122	50.0	49.0	98	86 - 116	47.2	94	4	10		
79-01-6	Trichloroethene	0.00	0.161	50.0	49.5	99	85 - 124	48.0	96	3	10		
75-69-4	Trichlorofluoromethane	0.00	0.157	50.0	52.4	105	66 - 156	51.7	103	1	15		
76-13-1	Trichlorotrifluoroethane	0.00	0.158	50.0	51.1	102	74 - 139	50.4	101	1	13		
75-01-4	Vinyl chloride	0.00	0.127	50.0	51.3	103	57 - 153	50.7	101	1	22		
1330-20-7	Xylene (total)	0.00	0.179	150	143	95	74 - 127	144	96	1	30		
156-59-2	cis-1,2-Dichloroethene	0.00	0.103	50.0	47.7	95	81 - 114	48.7	97	2	10		
10061-01-5	cis-1,3-Dichloropropene	0.00	0.124	50.0	50.8	102	83 - 119	50.5	101	1	10		
136777-61-2	m,p-Xylene	0.00	0.123	100	95.8	96	83 - 121	95.1	95	1	10		
104-51-8	n-Butylbenzene	0.00	0.123	50.0	43.7	87	84 - 124	41.4	83*	5	10		
103-65-1	n-Propylbenzene	0.00	0.727	50.0	44.5	89	86 - 125	41.2	82*	8	10		
95-47-6	o-Xylene	0.00	0.055	50.0	47.6	95	83 - 121	49.1	98	3	10		
135-98-8	sec-Butylbenzene	0.00	0.107	50.0	46.3	93	86 - 127	42.7	85*	8	10		
1634-04-4	tert-Butyl methyl ether (MTBE)	0.00	0.078	50.0	49.7	99	75 - 116	51.1	102	3	10		
98-06-6	tert-Butylbenzene	0.00	0.087	50.0	46.0	92	83 - 126	42.9	86	7	10		
156-60-5	trans-1,2-Dichloroethene	0.00	0.077	50.0	47.6	95	82 - 126	48.6	97	2	10		
10061-02-6	trans-1,3-Dichloropropene	0.00	0.128	50.0	52.3	105	87 - 123	52.7	105	1	10		
110-57-6	trans-1,4-Dichloro-2-butene	0.00	0.264	50.0	55.5	111	51 - 137	52.9	106	5	24		
Surrogate													
460-00-4	4-Bromofluorobenzene	51.6	103	50	53.7	107	84 - 120	55.9	112				
1868-53-7	Dibromofluoromethane	51.4	103	50	50.8	102	87 - 116	52.5	105				
2037-26-5	Toluene d8	51.4	103	50	50.7	101	86 - 112	50.8	102				
17060-07-0	1,2-Dichloroethane-d4	51.6	103	50	49	98	76 - 127	51.4	103				

Inorganics Quality Control Summary

Analytical Batch 512397 Prep Batch 512290 Prep Method SW-846 7470A	Client ID MB512290 GCAL ID 1216412 Sample Type Method Blank Prep Date 07/24/2013 14:10 Analytical Date 07/25/2013 11:53 Matrix Water	LCSS12290 1216413 LCS 07/24/2013 14:10 07/25/2013 11:54 Water
SW-846 7470A Dissolved	Units mg/L Result RDL	Spike Added Result % R Control Limits % R
7439-97-6 Mercury	0.000068U 0.000068	0.0050 0.0048 96 88 - 111

Analytical Batch 512397 Prep Batch 512290 Prep Method SW-846 7470A Dissolved	Client ID MW-08-06 GCAL ID 21307231904 Sample Type SAMPLE Prep Date 07/24/2013 14:10 Analytical Date 07/25/2013 11:56 Matrix Water	MW-08-06-MS 21307231905 MS 07/24/2013 14:10 07/25/2013 11:59 Water	MW-08-06-MSD 21307231906 MSD 07/24/2013 14:10 07/25/2013 12:03 Water
SW-846 7470A Dissolved	Units mg/L Result RDL	Spike Added Result % R Control Limits % R	Result % R RPD RPD Limit
7439-97-6 Mercury	0.0 0.000068	0.0050 0.0048 93 88 - 111	0.0045 89 4 10

Inorganics Quality Control Summary

Analytical Batch 512397 Prep Batch 512290 Prep Method SW-846 7470A	Client ID MB512290 GCAL ID 1216412 Sample Type Method Blank Prep Date 07/24/2013 14:10 Analytical Date 07/25/2013 11:53 Matrix Water	LCSS12290 1216413 LCS 07/24/2013 14:10 07/25/2013 11:54 Water
SW-846 7470A Dissolved	Units mg/L Result RDL	Spike Added Result % R Control Limits % R
7439-97-6 Mercury	0.000068U 0.000068	0.0050 0.0048 96 88 - 111

Analytical Batch 512397 Prep Batch 512290 Prep Method SW-846 7470A	Client ID MW-08-06 GCAL ID 21307231904 Sample Type SAMPLE Prep Date 07/24/2013 14:10 Analytical Date 07/25/2013 11:58 Matrix Water	MW-08-06-MS 21307231905 MS 07/24/2013 14:10 07/25/2013 12:01 Water	MW-08-06-MSD 21307231906 MSD 07/24/2013 14:10 07/25/2013 12:05 Water
SW-846 7470A Water	Units mg/L Result RDL	Spike Added Result % R Control Limits % R	Result % R RPD RPD Limit
7439-97-6 Mercury	0.0 0.000068	0.0050 0.0040 80 80 - 120	0.0041 82 3 10

Inorganics Quality Control Summary

Analytical Batch 512445 Prep Batch 512143 Prep Method SW-846 3005 Dissolved		Client ID MB512143 GCAL ID 1215806 Sample Type Method Blank Prep Date 07/24/2013 13:10 Analytical Date 07/26/2013 11:33 Matrix Water		LCS512143 1215807 LCS 07/24/2013 13:10 07/26/2013 11:41 Water			
SW-846 6010C Dissolved		Units Result	mg/L RDL	Spike Added	Result	% R	Control Limits % R
7429-90-5	Aluminum	0.050U	0.050	5.00	5.09	102	80 - 120
7440-36-0	Antimony	0.015U	0.015	0.50	0.49	99	80 - 120
7440-38-2	Arsenic	0.0050U	0.0050	0.50	0.49	98	80 - 120
7440-39-3	Barium	0.0025U	0.0025	0.50	0.51	101	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	0.51	102	80 - 120
7440-70-2	Calcium	0.20U	0.20	5.00	5.06	101	80 - 120
7440-47-3	Chromium	0.0025U	0.0025	0.50	0.50	100	80 - 120
7440-48-4	Cobalt	0.0025U	0.0025	0.50	0.50	100	80 - 120
7440-50-8	Copper	0.0050U	0.0050	0.50	0.51	102	80 - 120
7439-89-6	Iron	0.050U	0.050	5.00	5.11	102	80 - 120
7439-92-1	Lead	0.0038U	0.0038	0.50	0.50	100	80 - 120
7439-95-4	Magnesium	0.050U	0.050	5.00	5.06	101	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	10.2	102	80 - 120
7782-49-2	Selenium	0.010U	0.010	0.50	0.51	102	80 - 120
7440-22-4	Silver	0.0025U	0.0025	0.50	0.51	102	80 - 120
7440-23-5	Sodium	0.25U	0.25	20.0	21.0	105	80 - 120
7440-28-0	Thallium	0.0050U	0.0050	0.50	0.50	100	80 - 120
7440-62-2	Vanadium	0.0050U	0.0050	0.50	0.50	100	80 - 120
7440-66-6	Zinc	0.0050U	0.0050	0.50	0.51	101	80 - 120

Inorganics Quality Control Summary

Analytical Batch	512445	Client ID	MW-08-06	MW-08-06-MS	MW-08-06-MSD						
Prep Batch	512143	GCAL ID	21307231904	21307231905	21307231906						
Prep Method	SW-846 3005	Sample Type	SAMPLE	MS	MSD						
	Dissolved	Prep Date	07/24/2013 13:10	07/24/2013 13:10	07/24/2013 13:10						
		Analytical Date	07/25/2013 16:05	07/25/2013 16:12	07/25/2013 16:19						
		Matrix	Water	Water	Water						
SW-846 6010C Dissolved		Units	mg/L	Spike	Result	% R	Control	Result	% R	RPD	RPD
		Result	RDL	Added			Limits % R				Limit
7429-90-5	Aluminum	0.0	0.50	5.00	5.00	100	80 - 120	5.24	105	5	20
7440-38-0	Antimony	0.032	0.15	0.50	0.53	101	80 - 120	0.54	102	1	20
7440-38-2	Arsenic	0.022	0.050	0.50	0.56	107	80 - 120	0.52	99	7	20
7440-39-3	Barium	0.011	0.025	0.50	0.53	103	80 - 120	0.53	103	0	20
7440-41-7	Beryllium	0.0	0.010	0.50	0.50	100	80 - 120	0.49	99	1	20
7440-43-9	Cadmium	0.0	0.013	0.50	0.50	99	80 - 120	0.49	99	1	20
7440-70-2	Calcium	583	2.00	5.00	602	383*	80 - 120	590	139*	2	20
7440-47-3	Chromium	0.0075	0.025	0.50	0.51	100	80 - 120	0.51	100	0	20
7440-48-4	Cobalt	0.0	0.025	0.50	0.49	98	80 - 120	0.49	98	0	20
7440-50-8	Copper	0.19	0.050	0.50	0.71	103	80 - 120	0.72	105	2	20
7439-89-6	Iron	0.0	0.50	5.00	4.75	95	80 - 120	4.67	93	2	20
7439-92-1	Lead	0.0	0.038	0.50	0.47	94	80 - 120	0.46	93	1	20
7439-95-4	Magnesium	1230	0.50	5.00	1260	632*	80 - 120	1240	145*	2	20
7439-96-5	Manganese	0.0	0.038	0.50	0.47	94	80 - 120	0.47	93	1	20
7440-02-0	Nickel	0.0	0.10	0.50	0.51	101	80 - 120	0.50	101	0	20
7440-09-7	Potassium	31.0	1.25	10.0	41.0	99	80 - 120	40.4	94	1	20
7782-49-2	Selenium	0.0	0.10	0.50	0.52	104	80 - 120	0.50	99	4	20
7440-22-4	Silver	0.0026	0.025	0.50	0.51	102	80 - 120	0.51	101	1	20
7440-28-0	Thallium	0.035	0.050	0.50	0.51	96	80 - 120	0.50	92	3	20
7440-62-2	Vanadium	0.65	0.050	0.50	1.17	104	80 - 120	1.18	107	1	20
7440-66-6	Zinc	0.0	0.050	0.50	0.49	97	80 - 120	0.49	97	0	20

Analytical Batch	512529	Client ID	MW-08-06	MW-08-06-MS	MW-08-06-MSD						
Prep Batch	512143	GCAL ID	21307231904	21307231905	21307231906						
Prep Method	SW-846 3005	Sample Type	SAMPLE	MS	MSD						
	Dissolved	Prep Date	07/24/2013 13:10	07/24/2013 13:10	07/24/2013 13:10						
		Analytical Date	07/26/2013 17:12	07/26/2013 17:20	07/26/2013 17:27						
		Matrix	Water	Water	Water						
SW-846 6010C Dissolved		Units	mg/L	Spike	Result	% R	Control	Result	% R	RPD	RPD
		Result	RDL	Added			Limits % R				Limit
7440-23-5	Sodium	6430	25.0	20.0	6630	971*	80 - 120	6460	141*	3	20

General Chemistry Quality Control Summary

Analytical Batch Prep Batch	512286 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	M8512286 1216397 Method Blank 07/23/2013 16:15 Water	LCS512286 1216398 LCS 07/23/2013 16:15 Water			
SM 2540 C - 1997		Units Result	mg/L RDL	Spike Added	Result	% R	Control Limits % R
WET-035	Total Dissolved Solids(TDS)	4.39U	4.39	1000	992	99	90 - 110

Analytical Batch Prep Batch	512286 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	BV-14 21307223801 SAMPLE 07/23/2013 16:15 Water	1216062DUP 1216399 DUP 07/23/2013 16:15 Water			
SM 2540 C - 1997		Units Result	mg/L RDL	Result	RPD	RPD Limit	
WET-035	Total Dissolved Solids(TDS)	434	4.39	424	2	5	

Analytical Batch Prep Batch	512286 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MW-08-06 21307231904 SAMPLE 07/23/2013 16:15 Water	1216257DUP 1216400 DUP 07/23/2013 16:15 Water			
SM 2540 C - 1997		Units Result	mg/L RDL	Result	RPD	RPD Limit	
WET-035	Total Dissolved Solids(TDS)	25300	4.39	24600	3	5	

Analytical Batch Prep Batch	512404 N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	M8512404 1217127 Method Blank 07/25/2013 10:50 Water	LCS512404 1217128 LCS 07/25/2013 10:50 Water			
SM 2540 C - 1997		Units Result	mg/L RDL	Spike Added	Result	% R	Control Limits % R
WET-035	Total Dissolved Solids(TDS)	4.39U	4.39	1000	1060	106	90 - 110

General Chemistry Quality Control Summary

Analytical Batch 512404 Prep Batch N/A	Client ID MW-08-04 GCAL ID 21307240701 Sample Type SAMPLE Analytical Date 07/25/2013 10:50 Matrix Water	1216725DUP 1217129 DUP 07/25/2013 10:50 Water			
SM 2540 C - 1997		Units mg/L Result RDL	Result	RPD	RPD Limit
WET-035	Total Dissolved Solids(TDS)	5590 4.39	5590	0	5

Analytical Batch 512404 Prep Batch N/A	Client ID U43010B GCAL ID 21307230603 Sample Type SAMPLE Analytical Date 07/25/2013 10:50 Matrix Water	1216201DUP 1217459 DUP 07/25/2013 10:50 Water			
SM 2540 C - 1997		Units mg/L Result RDL	Result	RPD	RPD Limit
WET-035	Total Dissolved Solids(TDS)	4650 4.39	4660	0	5

General Chemistry Quality Control Summary

Analytical Batch 512294 Prep Batch N/A	Client ID MB512294 GCAL ID 1216422 Sample Type Method Blank Analytical Date 07/23/2013 18:10 Matrix Water	LCS512294 1216423 LCS 07/23/2013 18:28 Water				
EPA 300.0		Units mg/L Result RDL	Spike Added	Result	% R	Control Limits % R
14797-55-8	Nitrate	0.020U 0.020	2.50	2.36	95	80 - 120

Analytical Batch 512294 Prep Batch N/A	Client ID MW-08-06 GCAL ID 21307231904 Sample Type SAMPLE Analytical Date 07/23/2013 21:56 Matrix Water	MW-08-06-MS 21307231905 MS 07/23/2013 22:14 Water	MW-08-06-MSD 21307231906 MSD 07/23/2013 22:31 Water							
EPA 300.0 Inorganic Anions		Units mg/L Result RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	RPD Limit
14797-55-8	Nitrate	13.2 1.00	125	127	91	75 - 125	123	88	3	25



HOLLAMANVIEW/4771/213072319/8/1/13

Page: 1 of 1

NV Project No: 10-0004

COC Number(1): 07222013-1

LIMS Number:

Chain of Custody and Analytical Request

Facility/Base I.D.: Holloman Air Force Base, New Mexico								Sample Analysis Requested ⁽⁵⁾						Quality Assurance Samples ⁽⁶⁾				
Project/Site Name: SD-08 Quarterly Groundwater Sampling (Q7)								Number of containers	VOCs (8260B)	TAL Metals (Dissolved) (6010B/7470A)	Mercury (Total) (6010B/7470A)	TDS (SM19 2540C)	Nitrate (3009056)	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number		
Client Name: USACE Omaha District																		
Collected by: Tony Lucero / Brian Parrish																		
Field Sample ID (8 Character Max)	ERPIMS LOCID (15 Character Max)	Date Collected (dd-mm-yy)	Time Collected (Military) (hh:mm)	Sample Depth (Beginning - ending)	SA Code (1)	Sample Number (19)	Sample Matrix (19)											
SD08-MW13-S10-MJ06*		22-07-2013	900	-	N		WG	☐	☐	☐	☐	☐	☐	☐	☐	☐	per Brian Parrish 7/25 (SH)	1
SD08-MW13-A-S10-MJ06-A*		22-07-2013	900	-	FD		WG	☐	☐	☐	☐	☐	☐	☐	☐	☐	per Brian Parrish 7/25 (SH)	2
SD08-MW12		22-07-2013	1020	-	N		WG	☐	☐	☐	☐	☐	☐	☐	☐	☐		3
MW-08-06		22-07-2013	1100	-	N		WG	☐	☐	☐	☐	☐	☐	☐	☐	☐		4
-08-06-MS		22-07-2013	1100	-	MS		WG	☐	☐	☐	☐	☐	☐	☐	☐	☐	removed per client (SH) 7/24	5
-W-08-06-MSD		22-07-2013	1100	-	MSD		WG	☐	☐	☐	☐	☐	☐	☐	☐	☐	removed per client (SH) 7/24	6
Trip Blank								X*										7

COMMENTS: Dissolved TAL Metals filtered in the field

* added per client (SH) 7/23 email confirmation

Custody Transfer Prior to Receipt by Laboratory

Relinquished By (Signed)	Date/Time	Received by (Signed)	Date/Time
Brian Parrish	07/23/13 10:30	Fred Ex	7/22/13
Fred Ex	7/23/13 10:30	Brian Parrish	7/23/13 10:30

Sample Delivery Details / Laboratory Receipt	
Delivered Directly to Lab:	Shipped No: 5,4 E22
Method of Shipment: Fed Ex	Airbill Number: 796283983410
Analytical Lab: GCAL	Delivery Location: Baton Rouge, LA
Lab Recipient:	Delivery Date/Time:

- Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
- 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) Sample, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-c)
- 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.)
- 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
- Sample Analysis Requested: Analytical method requested and number of containers provided for each
- 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)



SAMPLE RECEIVING CHECKLIST



SAMPLE DELIVERY GROUP 213072319		CHECKLIST	
Client 4771 - NationView LLC	Transport Method FEDEX	Were all samples received using proper thermal preservation?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
		When used, were all custody seals intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Profile Number 204817	Received By Saucier, Charlotte	Were all samples received in proper containers?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
		Were all samples received using proper chemical preservation?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Line Item(s) 3 - SD-08	Receive Date(s) 07/23/13	Was preservative added to any container at the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA
		Were all containers received in good condition?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
		Were all VOA vials received with no head space?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
		Do all sample labels match the Chain of Custody?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
		Did the Chain of Custody list the sampling technician?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
		Was the COC maintained i.e. all signatures, dates and time of receipt included?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
COOLERS		DISCREPANCIES	LABORATORY PRESERVATIONS
Airbill 796283983410	Temp(oC) 5.4 (E22)	None	None
NOTES			

ANALYTICAL RESULTS

PERFORMED BY

GULF COAST ANALYTICAL LABORATORIES, INC.

7979 GSRI Avenue
Baton Rouge, LA 70820

Report Date 07/30/2013

GCAL Report 213072407



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

Attn Jim Moore

Project Holloman AFB

CASE NARRATIVE

Client: NationView LLC **Report:** 213072407

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 SW-846 8260B analysis for analytical batch 512531, the LCS and/or LCSD recoveries are above the upper control limit for 2-Hexanone, 4-Methyl-2-pentanone and Styrene. These compounds were not detected in the associated samples.

METALS

In the SW-846 6010C analysis, all samples had to be diluted to eliminate a chemical or physical interference and/or to bracket the concentration of target analytes within the linear dynamic range of the instrument. This is reflected in the elevated reporting limits.

In the SW-846 6010C analysis for prep batch 512427, the MS/MSD recoveries are not applicable for Calcium, Magnesium and Sodium because the sample concentration is greater than four times the spike concentration.

In the SW-846 7470A analysis for prep batch 512428, the MS/MSD recoveries are not applicable for Mercury because the sample concentration is greater than four times the spike concentration.

CONVENTIONALS

In the SM 2540 C - 1997 (TDS) analysis, sample 21307240702 (MW-08-08) had to be diluted prior to filtration in order not to exceed the maximum residue allowed by the method.

In the EPA 300.0 analysis, all sample 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 213072407

THIS REPORT CONTAINS 36 PAGES.

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307240701	MW-08-04	Water	07/23/2013 08:35	07/24/2013 09:45
21307240702	MW-08-08	Water	07/23/2013 09:35	07/24/2013 09:45
21307240703	MW-08-05	Water	07/23/2013 10:25	07/24/2013 09:45
21307240704	S10-MW01	Water	07/23/2013 11:20	07/24/2013 09:45
21307240705	S10-MW01-A	Water	07/23/2013 11:20	07/24/2013 09:45
21307240706	TRIP BLANK	Water	07/23/2013 00:00	07/24/2013 09:45

Summary of Compounds Detected

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307240701	MW-08-04	Water	07/23/2013 08:35	07/24/2013 09:45

SW-846 7470A

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.00010J	0.00020	0.000068	mg/L

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.010	0.010	0.0025	mg/L
7440-70-2	Calcium	483	0.80	0.20	mg/L
7440-09-7	Potassium	15.5	0.50	0.13	mg/L
7440-62-2	Vanadium	0.025	0.020	0.0050	mg/L

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7439-95-4	Magnesium	292	2.00	0.50	mg/L
7440-23-5	Sodium	668	10.0	2.50	mg/L

SM 2540 C - 1997

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	5590	10.0	4.39	mg/L

EPA 300.0

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	6.10	2.50	0.100	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307240702	MW-08-08	Water	07/23/2013 09:35	07/24/2013 09:45

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-70-2	Calcium	644	4.00	1.00	mg/L
7439-96-5	Manganese	0.095	0.075	0.019	mg/L
7440-09-7	Potassium	39.9	2.50	0.63	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307240702	MW-08-08	Water	07/23/2013 09:35	07/24/2013 09:45

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7439-95-4	Magnesium	1770	4.00	1.00	mg/L
7440-23-5	Sodium	7730	20.0	5.00	mg/L

SW-846 7470A Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.00010J	0.00020	0.000068	mg/L

SW-846 7470A

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.00011J	0.00020	0.000068	mg/L

SM 2540 C - 1997

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	39500	100	43.9	mg/L

EPA 300.0

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	15.9J	25.0	1.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307240703	MW-08-05	Water	07/23/2013 10:25	07/24/2013 09:45

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.016	0.010	0.0025	mg/L
7440-70-2	Calcium	544	0.80	0.20	mg/L
7439-96-5	Manganese	0.016	0.015	0.0038	mg/L
7440-09-7	Potassium	6.90	0.50	0.13	mg/L
7440-23-5	Sodium	77.8	1.00	0.25	mg/L
7440-62-2	Vanadium	0.0075J	0.020	0.0050	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307240703	MW-08-05	Water	07/23/2013 10:25	07/24/2013 09:45

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7439-95-4	Magnesium	58.4	2.00	0.50	mg/L

EPA 300.0

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	0.351J	1.00	0.040	mg/L

SM 2540 C - 1997

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	2950	10.0	4.39	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307240704	S10-MW01	Water	07/23/2013 11:20	07/24/2013 09:45

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.0071J	0.010	0.0025	mg/L
7440-70-2	Calcium	461	0.80	0.20	mg/L
7439-96-5	Manganese	0.16	0.015	0.0038	mg/L
7440-09-7	Potassium	20.8	0.50	0.13	mg/L
7440-62-2	Vanadium	0.039	0.020	0.0050	mg/L

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7439-95-4	Magnesium	571	2.00	0.50	mg/L
7440-23-5	Sodium	2860	10.0	2.50	mg/L

SM 2540 C - 1997

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	13700	10.0	4.39	mg/L

EPA 300.0

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	4.10J	10.0	0.400	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307240704	S10-MW01	Water	07/23/2013 11:20	07/24/2013 09:45

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
107-06-2	1,2-Dichloroethane	12.7	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.269J	5.00	0.150	ug/L
79-01-6	Trichloroethene	0.443J	5.00	0.161	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307240705	S10-MW01-A	Water	07/23/2013 11:20	07/24/2013 09:45

SW-846 7470A Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000090J	0.00020	0.000068	mg/L

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.0063J	0.010	0.0025	mg/L
7440-70-2	Calcium	443	0.80	0.20	mg/L
7439-96-5	Manganese	0.16	0.015	0.0038	mg/L
7440-09-7	Potassium	19.8	0.50	0.13	mg/L
7440-62-2	Vanadium	0.039	0.020	0.0050	mg/L

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7439-95-4	Magnesium	521	2.00	0.50	mg/L
7440-23-5	Sodium	2580	10.0	2.50	mg/L

SM 2540 C - 1997

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	13100	10.0	4.39	mg/L

EPA 300.0

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	4.23J	10.0	0.400	mg/L

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
107-06-2	1,2-Dichloroethane	12.4	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	0.456J	5.00	0.150	ug/L
79-01-6	Trichloroethene	2.38J	5.00	0.161	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307240701	MW-08-04	Water	07/23/2013 08:35	07/24/2013 09:45

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	07/26/2013 19:27	JCK	512531

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 21307240701	Client ID MW-08-04	Matrix Water	Collect Date/Time 07/23/2013 08:35	Receive Date/Time 07/24/2013 09:45
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SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	07/26/2013 19:27	JCK	512531

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	50.2	ug/L	100	87 - 116
2037-26-5	Toluene d8	50	52.9	ug/L	106	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	49.5	ug/L	99	76 - 127

SW-846 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/25/2013 15:35	512429	SW-846 7470A Dissolved	1	07/26/2013 13:08	AWG	512537

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.00020	0.000068	mg/L

SW-846 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/25/2013 13:50	512428	SW-846 7470A	1	07/25/2013 17:48	AWG	512397

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.00010J	0.00020	0.000068	mg/L

GCAL ID 21307240701	Client ID MW-08-04	Matrix Water	Collect Date/Time 07/23/2013 08:35	Receive Date/Time 07/24/2013 09:45
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SW-846 6010C Dissolved

Prep Date 07/25/2013 13:50	Prep Batch 512427	Prep Method SW-846 3005 Dissolved	Dilution 10	Analyzed 07/29/2013 17:16	By BAM	Analytical Batch 512669
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CAS#	Parameter	Result	RDL	MDL	Units
7439-89-6	Iron	0.50U	2.00	0.50	mg/L
7439-95-4	Magnesium	292	2.00	0.50	mg/L
7440-23-5	Sodium	668	10.0	2.50	mg/L

SW-846 6010C Dissolved

Prep Date 07/25/2013 13:50	Prep Batch 512427	Prep Method SW-846 3005 Dissolved	Dilution 1	Analyzed 07/29/2013 19:18	By BAM	Analytical Batch 512669
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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	0.010	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	483	0.80	0.20	mg/L
7440-47-3	Chromium	0.0025U	0.010	0.0025	mg/L
7440-48-4	Cobalt	0.0025U	0.010	0.0025	mg/L
7440-50-8	Copper	0.0050U	0.020	0.0050	mg/L
7439-92-1	Lead	0.0038U	0.015	0.0038	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	15.5	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
7440-28-0	Thallium	0.0050U	0.020	0.0050	mg/L
7440-62-2	Vanadium	0.025	0.020	0.0050	mg/L
7440-66-6	Zinc	0.0050U	0.020	0.0050	mg/L

SM 2540 C - 1997

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	07/25/2013 10:50	DJH	512404

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	5590	10.0	4.39	mg/L

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			5	07/24/2013 17:36	MCP	512358

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	6.10	2.50	0.100	mg/L

GCAL ID 21307240702	Client ID MW-08-08	Matrix Water	Collect Date/Time 07/23/2013 09:35	Receive Date/Time 07/24/2013 09:45
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SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 07/26/2013 19:50	By JCK	Analytical Batch 512531
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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 21307240702	Client ID MW-08-08	Matrix Water	Collect Date/Time 07/23/2013 09:35	Receive Date/Time 07/24/2013 09:45
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SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	07/26/2013 19:50	JCK	512531

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	50.6	ug/L	101	84 - 120
1868-53-7	Dibromofluoromethane	50	50.5	ug/L	101	87 - 116
2037-26-5	Toluene d8	50	52.4	ug/L	105	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	49.6	ug/L	99	76 - 127

SW-846 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/25/2013 15:35	512429	SW-846 7470A Dissolved	1	07/26/2013 13:10	AWG	512537

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.00010J	0.00020	0.000068	mg/L

SW-846 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/25/2013 13:50	512428	SW-846 7470A	1	07/25/2013 17:50	AWG	512397

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.00011J	0.00020	0.000068	mg/L

GCAL ID 21307240702	Client ID MW-08-08	Matrix Water	Collect Date/Time 07/23/2013 09:35	Receive Date/Time 07/24/2013 09:45
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SW-846 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/25/2013 13:50	512427	SW-846 3005 Dissolved	20	07/29/2013 18:57	BAM	512669

CAS#	Parameter	Result	RDL	MDL	Units
7439-89-6	Iron	1.00U	4.00	1.00	mg/L
7439-95-4	Magnesium	1770	4.00	1.00	mg/L
7440-23-5	Sodium	7730	20.0	5.00	mg/L

SW-846 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/25/2013 13:50	512427	SW-846 3005 Dissolved	5	07/29/2013 19:53	BAM	512669

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	0.25U	1.00	0.25	mg/L
7440-36-0	Antimony	0.075U	0.30	0.075	mg/L
7440-38-2	Arsenic	0.025U	0.10	0.025	mg/L
7440-39-3	Barium	0.013U	0.050	0.013	mg/L
7440-41-7	Beryllium	0.0050U	0.020	0.0050	mg/L
7440-43-9	Cadmium	0.0063U	0.025	0.0063	mg/L
7440-70-2	Calcium	644	4.00	1.00	mg/L
7440-47-3	Chromium	0.013U	0.050	0.013	mg/L
7440-48-4	Cobalt	0.013U	0.050	0.013	mg/L
7440-50-8	Copper	0.025U	0.10	0.025	mg/L
7439-92-1	Lead	0.019U	0.075	0.019	mg/L
7439-96-5	Manganese	0.095	0.075	0.019	mg/L
7440-02-0	Nickel	0.050U	0.20	0.050	mg/L
7440-09-7	Potassium	39.9	2.50	0.63	mg/L
7782-49-2	Selenium	0.050U	0.20	0.050	mg/L
7440-22-4	Silver	0.013U	0.050	0.013	mg/L
7440-28-0	Thallium	0.025U	0.10	0.025	mg/L
7440-62-2	Vanadium	0.025U	0.10	0.025	mg/L
7440-66-6	Zinc	0.025U	0.10	0.025	mg/L

SM 2540 C - 1997

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	07/25/2013 10:50	DJH	512404

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	39500	100	43.9	mg/L

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			50	07/24/2013 18:28	MCP	512358

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	15.9J	25.0	1.00	mg/L

GCAL ID 21307240703	Client ID MW-08-05	Matrix Water	Collect Date/Time 07/23/2013 10:25	Receive Date/Time 07/24/2013 09:45
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SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 07/26/2013 20:13	By JCK	Analytical Batch 512531
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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 21307240703	Client ID MW-08-05	Matrix Water	Collect Date/Time 07/23/2013 10:25	Receive Date/Time 07/24/2013 09:45
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SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	07/26/2013 20:13	JCK	512531

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	51.3	ug/L	103	84 - 120
1868-53-7	Dibromofluoromethane	50	50.3	ug/L	101	87 - 116
2037-26-5	Toluene d8	50	53.3	ug/L	107	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	49.5	ug/L	99	76 - 127

SW-846 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/25/2013 15:35	512429	SW-846 7470A Dissolved	1	07/26/2013 13:12	AWG	512537

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.00020	0.000068	mg/L

SW-846 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/25/2013 13:50	512428	SW-846 7470A	1	07/25/2013 17:52	AWG	512397

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.00020	0.000068	mg/L

GCAL ID 21307240703	Client ID MW-08-05	Matrix Water	Collect Date/Time 07/23/2013 10:25	Receive Date/Time 07/24/2013 09:45
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SW-846 6010C Dissolved

Prep Date 07/25/2013 13:50	Prep Batch 512427	Prep Method SW-846 3005 Dissolved	Dilution 10	Analyzed 07/29/2013 17:55	By BAM	Analytical Batch 512669
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CAS#	Parameter	Result	RDL	MDL	Units
7439-89-6	Iron	0.50U	2.00	0.50	mg/L
7439-95-4	Magnesium	58.4	2.00	0.50	mg/L

SW-846 6010C Dissolved

Prep Date 07/25/2013 13:50	Prep Batch 512427	Prep Method SW-846 3005 Dissolved	Dilution 1	Analyzed 07/29/2013 20:00	By BAM	Analytical Batch 512669
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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	0.016	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	544	0.80	0.20	mg/L
7440-47-3	Chromium	0.0025U	0.010	0.0025	mg/L
7440-48-4	Cobalt	0.0025U	0.010	0.0025	mg/L
7440-50-8	Copper	0.0050U	0.020	0.0050	mg/L
7439-92-1	Lead	0.0038U	0.015	0.0038	mg/L
7439-96-5	Manganese	0.016	0.015	0.0038	mg/L
7440-02-0	Nickel	0.010U	0.040	0.010	mg/L
7440-09-7	Potassium	6.90	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	77.8	1.00	0.25	mg/L
7440-28-0	Thallium	0.0050U	0.020	0.0050	mg/L
7440-62-2	Vanadium	0.0075J	0.020	0.0050	mg/L
7440-66-6	Zinc	0.0050U	0.020	0.0050	mg/L

SM 2540 C - 1997

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	07/25/2013 10:50	DJH	512404

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	2950	10.0	4.39	mg/L

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			2	07/24/2013 18:46	MCP	512358

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	0.351J	1.00	0.040	mg/L

GCAL ID 21307240704	Client ID S10-MW01	Matrix Water	Collect Date/Time 07/23/2013 11:20	Receive Date/Time 07/24/2013 09:45
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SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 07/26/2013 20:36	By JCK	Analytical Batch 512531
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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	12.7	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	0.269J	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 21307240704	Client ID S10-MW01	Matrix Water	Collect Date/Time 07/23/2013 11:20	Receive Date/Time 07/24/2013 09:45
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SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	07/26/2013 20:36	JCK	512531

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	0.443J	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	50.1	ug/L	100	84 - 120
1868-53-7	Dibromofluoromethane	50	49	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	48.6	ug/L	97	76 - 127

SW-846 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/25/2013 15:35	512429	SW-846 7470A Dissolved	1	07/26/2013 11:54	AWG	512494

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.00020	0.000068	mg/L

SW-846 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/25/2013 13:50	512428	SW-846 7470A	1	07/25/2013 17:53	AWG	512397

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.00020	0.000068	mg/L

GCAL ID 21307240704	Client ID S10-MW01	Matrix Water	Collect Date/Time 07/23/2013 11:20	Receive Date/Time 07/24/2013 09:45
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SW-846 6010C Dissolved

Prep Date 07/25/2013 13:50	Prep Batch 512427	Prep Method SW-846 3005 Dissolved	Dilution 10	Analyzed 07/29/2013 18:02	By BAM	Analytical Batch 512669
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CAS#	Parameter	Result	RDL	MDL	Units
7439-89-6	Iron	0.50U	2.00	0.50	mg/L
7439-95-4	Magnesium	571	2.00	0.50	mg/L
7440-23-5	Sodium	2860	10.0	2.50	mg/L

SW-846 6010C Dissolved

Prep Date 07/25/2013 13:50	Prep Batch 512427	Prep Method SW-846 3005 Dissolved	Dilution 1	Analyzed 07/29/2013 20:06	By BAM	Analytical Batch 512669
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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	0.0071J	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	461	0.80	0.20	mg/L
7440-47-3	Chromium	0.0025U	0.010	0.0025	mg/L
7440-48-4	Cobalt	0.0025U	0.010	0.0025	mg/L
7440-50-8	Copper	0.0050U	0.020	0.0050	mg/L
7439-92-1	Lead	0.0038U	0.015	0.0038	mg/L
7439-96-5	Manganese	0.16	0.015	0.0038	mg/L
7440-02-0	Nickel	0.010U	0.040	0.010	mg/L
7440-09-7	Potassium	20.8	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
7440-28-0	Thallium	0.0050U	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 - 1997

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	07/25/2013 10:50	DJH	512404

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	13700	10.0	4.39	mg/L

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			20	07/24/2013 19:03	MCP	512358

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	4.10J	10.0	0.400	mg/L

GCAL ID 21307240705	Client ID S10-MW01-A	Matrix Water	Collect Date/Time 07/23/2013 11:20	Receive Date/Time 07/24/2013 09:45
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SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 07/26/2013 20:59	By JCK	Analytical Batch 512531
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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	12.4	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	0.456J	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 21307240705	Client ID S10-MW01-A	Matrix Water	Collect Date/Time 07/23/2013 11:20	Receive Date/Time 07/24/2013 09:45
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SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	07/26/2013 20:59	JCK	512531

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	2.38J	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	50.3	ug/L	101	87 - 116
2037-26-5	Toluene d8	50	52.9	ug/L	106	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	49.1	ug/L	98	76 - 127

SW-846 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/25/2013 15:35	512429	SW-846 7470A Dissolved	1	07/26/2013 13:13	AWG	512537

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000090J	0.00020	0.000068	mg/L

SW-846 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/25/2013 13:50	512428	SW-846 7470A	1	07/25/2013 17:55	AWG	512397

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.00020	0.000068	mg/L

GCAL ID 21307240705	Client ID S10-MW01-A	Matrix Water	Collect Date/Time 07/23/2013 11:20	Receive Date/Time 07/24/2013 09:45
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SW-846 6010C Dissolved

Prep Date 07/25/2013 13:50	Prep Batch 512427	Prep Method SW-846 3005 Dissolved	Dilution 10	Analyzed 07/29/2013 18:22	By BAM	Analytical Batch 512669
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CAS#	Parameter	Result	RDL	MDL	Units
7439-89-6	Iron	0.50U	2.00	0.50	mg/L
7439-95-4	Magnesium	521	2.00	0.50	mg/L
7440-23-5	Sodium	2580	10.0	2.50	mg/L

SW-846 6010C Dissolved

Prep Date 07/25/2013 13:50	Prep Batch 512427	Prep Method SW-846 3005 Dissolved	Dilution 1	Analyzed 07/29/2013 20:13	By BAM	Analytical Batch 512669
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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	0.0063J	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	443	0.80	0.20	mg/L
7440-47-3	Chromium	0.0025U	0.010	0.0025	mg/L
7440-48-4	Cobalt	0.0025U	0.010	0.0025	mg/L
7440-50-8	Copper	0.0050U	0.020	0.0050	mg/L
7439-92-1	Lead	0.0038U	0.015	0.0038	mg/L
7439-96-5	Manganese	0.16	0.015	0.0038	mg/L
7440-02-0	Nickel	0.010U	0.040	0.010	mg/L
7440-09-7	Potassium	19.8	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
7440-28-0	Thallium	0.0050U	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 - 1997

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	07/25/2013 10:50	DJH	512404

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	13100	10.0	4.39	mg/L

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			20	07/24/2013 19:20	MCP	512358

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	4.23J	10.0	0.400	mg/L

GCAL ID 21307240706	Client ID TRIP BLANK	Matrix Water	Collect Date/Time 07/23/2013 00:00	Receive Date/Time 07/24/2013 09:45
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SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 07/26/2013 21:21	By JCK	Analytical Batch 512531
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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 21307240706	Client ID TRIP BLANK	Matrix Water	Collect Date/Time 07/23/2013 00:00	Receive Date/Time 07/24/2013 09:45
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SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 07/26/2013 21:21	By JCK	Analytical Batch 512531
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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	50.7	ug/L	101	84 - 120
1868-53-7	Dibromofluoromethane	50	49.8	ug/L	100	87 - 116
2037-26-5	Toluene d8	50	53.1	ug/L	106	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	47.8	ug/L	96	76 - 127

GC/MS Volatiles Quality Control Summary

Analytical Batch 512531 Prep Batch N/A		Client ID MB512531 GCAL ID 1217749 Sample Type Method Blank Analytical Date 07/26/2013 15:47 Matrix Water		LCS512531 1217750 LCS 07/26/2013 14:08 Water			LCSD512531 1217751 LCSD 07/26/2013 21:44 Water				
SW-846 8260B		Units	ug/L	Spike	Result	% R	Control	Result	% R	RPD	RPD
		Result	RDL	Added			Limits % R				Limit
67-64-1	Acetone	0.193U	0.193	50.0	50.4	101	59 - 134	51.1	102	1	30
74-97-5	Bromochloromethane	0.127U	0.127	50.0	50.0	100	78 - 112	51.2	102	2	30
75-27-4	Bromodichloromethane	0.083U	0.083	50.0	49.8	100	76 - 116	51.0	102	2	30
75-25-2	Bromoform	0.215U	0.215	50.0	53.3	107	68 - 128	50.3	101	6	30
74-83-9	Bromomethane	0.427U	0.427	50.0	37.8	76	55 - 151	34.8	70	8	30
75-15-0	Carbon disulfide	0.190U	0.190	50.0	49.2	98	67 - 147	53.1	106	8	30
56-23-5	Carbon tetrachloride	0.248U	0.248	50.0	44.2	88	74 - 139	46.3	93	5	30
75-00-3	Chloroethane	0.235U	0.235	50.0	49.6	99	54 - 166	50.8	102	2	30
136777-61-2	m,p-Xylene	0.123U	0.123	100	113	113	83 - 121	113	113	0	30
67-66-3	Chloroform	0.155U	0.155	50.0	47.1	94	85 - 123	49.1	98	4	30
74-87-3	Chloromethane	0.144U	0.144	50.0	43.9	88	55 - 173	43.5	87	1	30
124-48-1	Dibromochloromethane	0.054U	0.054	50.0	53.2	106	74 - 116	50.4	101	5	30
74-95-3	Dibromomethane	0.211U	0.211	50.0	51.1	102	81 - 116	52.1	104	2	30
75-71-8	Dichlorodifluoromethane	0.145U	0.145	50.0	45.5	91	34 - 158	44.9	90	1	30
75-34-3	1,1-Dichloroethane	0.171U	0.171	50.0	49.5	99	82 - 127	51.8	104	5	30
107-06-2	1,2-Dichloroethane	0.116U	0.116	50.0	45.6	91	76 - 122	47.4	95	4	30
156-59-2	cis-1,2-Dichloroethane	0.103U	0.103	50.0	53.0	106	81 - 114	52.9	106	0	30
156-60-5	trans-1,2-Dichloroethane	0.077U	0.077	50.0	49.3	99	82 - 126	50.9	102	3	30
75-09-2	Methylene chloride	0.149U	0.149	50.0	49.7	99	69 - 125	52.4	105	5	30
78-87-5	1,2-Dichloropropane	0.150U	0.150	50.0	54.9	110	81 - 120	56.1	112	2	30
10061-01-5	cis-1,3-Dichloropropene	0.124U	0.124	50.0	55.4	111	83 - 119	56.1	112	1	30
10061-02-6	trans-1,3-Dichloropropene	0.128U	0.128	50.0	53.1	106	87 - 123	53.8	108	1	30
100-41-4	Ethylbenzene	0.109U	0.109	50.0	54.4	109	87 - 118	53.5	107	2	30
591-78-6	2-Hexanone	0.122U	0.122	50.0	66.5	133*	58 - 125	60.4	121	10	30
98-82-8	Isopropylbenzene (Cumene)	0.130U	0.130	50.0	55.8	112	87 - 131	55.5	111	1	30
78-93-3	2-Butanone	0.142U	0.142	50.0	59.7	119	61 - 127	61.6	123	3	30
74-88-4	Methyl iodide	0.084U	0.084	50.0	47.8	96	72 - 125	48.4	97	1	30
108-10-1	4-Methyl-2-pentanone	0.120U	0.120	50.0	65.1	130*	62 - 125	63.5	127*	2	30
103-65-1	n-Propylbenzene	0.727U	0.727	50.0	53.3	107	86 - 125	53.3	107	0	30
100-42-5	Styrene	0.089U	0.089	50.0	61.0	122*	78 - 118	59.5	119*	2	30
127-18-4	Tetrachloroethene	0.193U	0.193	50.0	51.1	102	80 - 131	50.8	102	1	30
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	0.120	50.0	52.6	105	81 - 119	50.3	101	4	30
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	0.109	50.0	60.0	120	71 - 120	58.6	117	2	30

GC/MS Volatiles Quality Control Summary

Analytical Batch 512531 Prep Batch N/A		Client ID MB512531 GCAL ID 1217749 Sample Type Method Blank Analytical Date 07/26/2013 15:47 Matrix Water		LCS512531 1217750 LCS 07/26/2013 14:08 Water			LCSD512531 1217751 LCSD 07/26/2013 21:44 Water				
SW-846 8260B		Units	ug/L	Spike	Result	% R	Control	Result	% R	RPD	RPD
		Result	RDL	Added			Limits % R				Limit
120-82-1	1,2,4-Trichlorobenzene	0.105U	0.105	50.0	61.2	122	68 - 123	55.7	111	9	30
71-55-6	1,1,1-Trichloroethane	0.123U	0.123	50.0	45.1	90	79 - 133	46.9	94	4	30
79-00-5	1,1,2-Trichloroethane	0.159U	0.159	50.0	54.8	110	80 - 114	53.0	106	3	30
75-69-4	Trichlorofluoromethane	0.157U	0.157	50.0	43.9	88	66 - 156	47.5	95	8	30
96-18-4	1,2,3-Trichloropropane	0.065U	0.065	50.0	54.9	110	77 - 115	55.9	112	2	30
95-63-6	1,2,4-Trimethylbenzene	0.084U	0.084	50.0	54.8	110	82 - 120	53.7	107	2	30
108-67-8	1,3,5-Trimethylbenzene	0.066U	0.066	50.0	53.0	106	83 - 123	53.0	106	0	30
75-01-4	Vinyl chloride	0.127U	0.127	50.0	43.3	87	57 - 153	45.2	90	4	30
95-47-6	o-Xylene	0.055U	0.055	50.0	59.7	119	83 - 121	58.6	117	2	30
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	0.194	50.0	57.2	114	61 - 118	51.7	103	10	30
106-93-4	1,2-Dibromoethane	0.102U	0.102	50.0	55.6	111	80 - 115	52.4	105	6	30
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	0.078	50.0	52.3	105	75 - 116	49.8	100	5	30
540-59-0	1,2-Dichloroethene(Total)	0.180U	0.180	100	102	102	74 - 128	104	104	2	30
99-87-6	4-Isopropyltoluene	0.070U	0.070	50.0	55.3	111	83 - 125	54.7	109	1	30
1330-20-7	Xylene (total)	0.179U	0.179	150	173	115	74 - 127	172	115	1	30
110-57-6	trans-1,4-Dichloro-2-butene	0.264U	0.264	50.0	53.9	108	51 - 137	52.2	104	3	30
594-20-7	2,2-Dichloropropane	0.170U	0.170	50.0	47.5	95	77 - 138	47.3	95	0	30
76-13-1	Trichlorotrifluoroethane	0.158U	0.158	50.0	47.9	96	74 - 139	50.7	101	6	30
563-58-6	1,1-Dichloropropene	0.052U	0.052	50.0	48.9	98	87 - 127	50.9	102	4	30
142-28-9	1,3-Dichloropropane	0.059U	0.059	50.0	55.0	110	81 - 113	52.9	106	4	30
108-86-1	Bromobenzene	0.145U	0.145	50.0	52.8	106	83 - 115	51.9	104	2	30
95-49-8	2-Chlorotoluene	0.080U	0.080	50.0	53.9	108	81 - 121	52.6	105	2	30
106-43-4	4-Chlorotoluene	0.124U	0.124	50.0	53.2	106	84 - 120	51.7	103	3	30
98-06-6	tert-Butylbenzene	0.087U	0.087	50.0	50.7	101	83 - 126	49.8	100	2	30
135-98-8	sec-Butylbenzene	0.107U	0.107	50.0	53.3	107	86 - 127	53.7	107	1	30
541-73-1	1,3-Dichlorobenzene	0.138U	0.138	50.0	56.2	112	86 - 115	54.9	110	2	30
106-46-7	1,4-Dichlorobenzene	0.083U	0.083	50.0	52.0	104	87 - 113	51.4	103	1	30
104-51-8	n-Butylbenzene	0.123U	0.123	50.0	55.0	110	84 - 124	55.6	111	1	30
95-50-1	1,2-Dichlorobenzene	0.135U	0.135	50.0	57.1	114	85 - 115	55.3	111	3	30
87-68-3	Hexachlorobutadiene	0.265U	0.265	50.0	51.7	103	71 - 133	51.6	103	0	30
91-20-3	Naphthalene	0.176U	0.176	50.0	55.6	111	59 - 125	48.9	98	13	35
75-35-4	1,1-Dichloroethene	0.208U	0.208	50.0	51.2	102	75 - 133	52.7	105	3	20
71-43-2	Benzene	0.111U	0.111	50.0	52.8	106	83 - 124	55.2	110	4	20

GC/MS Volatiles Quality Control Summary

Analytical Batch 512531 Prep Batch N/A		Client ID MB512531 GCAL ID 1217749 Sample Type Method Blank Analytical Date 07/26/2013 15:47 Matrix Water		LCS512531 1217750 LCS 07/26/2013 14:08 Water			LCSD512531 1217751 LCSD 07/26/2013 21:44 Water				
SW-846 8260B		Units	ug/L	Spike	Result	% R	Control	Result	% R	RPD	RPD
		Result	RDL	Added			Limits % R				Limit
79-01-6	Trichloroethene	0.161U	0.161	50.0	52.4	105	85 - 124	53.9	108	3	20
108-88-3	Toluene	0.122U	0.122	50.0	51.9	104	86 - 116	51.6	103	1	20
108-90-7	Chlorobenzene	0.083U	0.083	50.0	53.5	107	87 - 115	53.0	106	1	20
Surrogate											
460-00-4	4-Bromofluorobenzene	51.2	102	50	52.3	105	84 - 120	50	100		
1868-53-7	Dibromofluoromethane	49.4	99	50	48.8	98	87 - 116	49.6	99		
2037-26-5	Toluene d8	52.4	105	50	48.1	96	86 - 112	46.6	93		
17060-07-0	1,2-Dichloroethane-d4	48.7	97	50	46.7	93	76 - 127	48.4	97		

Inorganics Quality Control Summary

Analytical Batch 512494 Prep Batch 512429 Prep Method SW-846 7470A	Client ID MB512429 GCAL ID 1217201 Sample Type Method Blank Prep Date 07/25/2013 15:35 Analytical Date 07/26/2013 11:47 Matrix Water	LCS512429 1217202 LCS 07/25/2013 15:35 07/26/2013 11:49 Water				
SW-846 7470A Dissolved	Units Result	mg/L RDL	Spike Added	Result	% R	Control Limits % R
7439-97-6 Mercury	0.000068U	0.000068	0.0050	0.0048	96	88 - 111

Analytical Batch 512494 Prep Batch 512429 Prep Method SW-846 7470A	Client ID S10-MW01 GCAL ID 21307240704 Sample Type SAMPLE Prep Date 07/25/2013 15:35 Analytical Date 07/26/2013 11:54 Matrix Water	1216728MS 1217203 MS 07/25/2013 15:35 07/26/2013 11:56 Water	1216728MSD 1217204 MSD 07/25/2013 15:35 07/26/2013 11:57 Water							
SW-846 7470A Dissolved	Units Result	mg/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	RPD Limit
7439-97-6 Mercury	0.0	0.000068	0.0050	0.0044	88	80 - 120	0.0045	90	3	20

Inorganics Quality Control Summary

Analytical Batch 512397 Prep Batch 512428 Prep Method SW-846 7470A	Client ID GCAL ID Sample Type Prep Date Analytical Date Matrix	MB512428 1217197 Method Blank 07/25/2013 13:50 07/25/2013 17:06 Water	LCS512428 1217198 LCS 07/25/2013 13:50 07/25/2013 17:08 Water				
SW-846 7470A		Units Result	mg/L RDL	Spike Added	Result	% R	Control Limits % R
7439-97-6	Mercury	0.000068U	0.000068	0.0050	0.0055	110	88 - 111

Analytical Batch 512397 Prep Batch 512428 Prep Method SW-846 7470A	Client ID GCAL ID Sample Type Prep Date Analytical Date Matrix	0356-19 19 DAY 21307245702 SAMPLE 07/25/2013 13:50 07/25/2013 18:15 Water	1216945MS 1217199 MS 07/25/2013 13:50 07/25/2013 18:17 Water	1216945MSD 1217200 MSD 07/25/2013 13:50 07/25/2013 18:19 Water							
SW-846 7470A		Units Result	mg/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	RPD Limit
7439-97-6	Mercury	8.8	0.14	0.0050	8.5	-6230*	80 - 120	8.6	-3830*	1	10

Inorganics Quality Control Summary

Analytical Batch 512669 Prep Batch 512427 Prep Method SW-846 3005 Dissolved		Client ID MB512427 GCAL ID 1217193 Sample Type Method Blank Prep Date 07/25/2013 13:50 Analytical Date 07/29/2013 17:01 Matrix Water	LCS512427 1217194 LCS 07/25/2013 13:50 07/29/2013 17:09 Water				
SW-846 6010C Dissolved		Units Result	mg/L RDL	Spike Added	Result	% R	Control Limits % R
7429-90-5	Aluminum	0.050U	0.050	5.00	4.98	100	80 - 120
7440-36-0	Antimony	0.015U	0.015	0.50	0.52	103	80 - 120
7440-38-2	Arsenic	0.0050U	0.0050	0.50	0.55	109	80 - 120
7440-39-3	Barium	0.0025U	0.0025	0.50	0.52	104	80 - 120
7440-41-7	Beryllium	0.0010U	0.0010	0.50	0.51	103	80 - 120
7440-43-9	Cadmium	0.0013U	0.0013	0.50	0.53	107	80 - 120
7440-70-2	Calcium	0.25J	0.20	5.00	5.34	107	80 - 120
7440-47-3	Chromium	0.0025U	0.0025	0.50	0.51	103	80 - 120
7440-48-4	Cobalt	0.0025U	0.0025	0.50	0.53	106	80 - 120
7440-50-8	Copper	0.0050U	0.0050	0.50	0.49	97	80 - 120
7439-89-6	Iron	0.050U	0.050	5.00	4.79	96	80 - 120
7439-92-1	Lead	0.0038U	0.0038	0.50	0.54	107	80 - 120
7439-95-4	Magnesium	0.050U	0.050	5.00	5.53	111	80 - 120
7439-96-5	Manganese	0.0038U	0.0038	0.50	0.51	103	80 - 120
7440-02-0	Nickel	0.010U	0.010	0.50	0.53	106	80 - 120
7440-09-7	Potassium	0.13U	0.13	10.0	9.57	96	80 - 120
7782-49-2	Selenium	0.010U	0.010	0.50	0.56	111	80 - 120
7440-22-4	Silver	0.0025U	0.0025	0.50	0.49	98	80 - 120
7440-23-5	Sodium	0.25U	0.25	20.0	20.8	104	80 - 120
7440-28-0	Thallium	0.0050U	0.0050	0.50	0.51	102	80 - 120
7440-62-2	Vanadium	0.0050U	0.0050	0.50	0.51	102	80 - 120
7440-66-6	Zinc	0.0056J	0.0050	0.50	0.52	103	80 - 120

Inorganics Quality Control Summary

Analytical Batch 512669 Prep Batch 512427 Prep Method SW-846 3005 Dissolved		Client ID MW-08-04 GCAL ID 21307240701 Sample Type SAMPLE Prep Date 07/25/2013 13:50 Analytical Date 07/29/2013 19:18 Matrix Water		1216725MS 1217195 MS 07/25/2013 13:50 07/29/2013 19:25 Water			1216725MSD 1217196 MSD 07/25/2013 13:50 07/29/2013 19:32 Water						
SW-846 6010C Dissolved				Units Result	mg/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	RPD Limit
7429-90-5	Aluminum	0.0	0.050	5.00	4.85	97	80 - 120	4.76	95	2	20		
7440-36-0	Antimony	0.0	0.015	0.50	0.54	109	80 - 120	0.55	110	1	20		
7440-38-2	Arsenic	0.0	0.0050	0.50	0.54	107	80 - 120	0.55	111	3	20		
7440-39-3	Barium	0.010	0.0025	0.50	0.50	98	80 - 120	0.50	98	0	20		
7440-41-7	Beryllium	0.0	0.0010	0.50	0.50	99	80 - 120	0.50	100	1	20		
7440-43-9	Cadmium	0.0	0.0013	0.50	0.46	91	80 - 120	0.47	93	2	20		
7440-70-2	Calcium	483	0.20	5.00	448	-705*	80 - 120	451	-636*	1	20		
7440-47-3	Chromium	0.0	0.0025	0.50	0.47	95	80 - 120	0.48	95	1	20		
7440-48-4	Cobalt	0.0	0.0025	0.50	0.48	97	80 - 120	0.47	95	3	20		
7440-50-8	Copper	0.0	0.0050	0.50	0.50	100	80 - 120	0.50	99	1	20		
7439-92-1	Lead	0.0	0.0038	0.50	0.46	91	80 - 120	0.46	91	0	20		
7439-96-5	Manganese	0.0	0.0038	0.50	0.49	98	80 - 120	0.49	98	0	20		
7440-02-0	Nickel	0.0	0.010	0.50	0.46	91	80 - 120	0.46	92	1	20		
7440-09-7	Potassium	15.5	0.13	10.0	26.0	106	80 - 120	25.3	98	3	20		
7782-49-2	Selenium	0.0	0.010	0.50	0.52	104	80 - 120	0.53	107	3	20		
7440-22-4	Silver	0.0	0.0025	0.50	0.51	103	80 - 120	0.51	102	1	20		
7440-28-0	Thallium	0.0	0.0050	0.50	0.44	88	80 - 120	0.45	90	2	20		
7440-62-2	Vanadium	0.025	0.0050	0.50	0.54	104	80 - 120	0.54	103	0	20		
7440-66-6	Zinc	0.0	0.0050	0.50	0.49	99	80 - 120	0.50	100	1	20		

Analytical Batch 512669 Prep Batch 512427 Prep Method SW-846 3005 Dissolved		Client ID MW-08-04 GCAL ID 21307240701 Sample Type SAMPLE Prep Date 07/25/2013 13:50 Analytical Date 07/29/2013 17:16 Matrix Water		1216725MS 1217195 MS 07/25/2013 13:50 07/29/2013 17:22 Water			1216725MSD 1217196 MSD 07/25/2013 13:50 07/29/2013 17:29 Water						
SW-846 6010C Dissolved				Units Result	mg/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	RPD Limit
7439-89-6	Iron	0.14	0.50	5.00	4.92	96	80 - 120	4.92	96	0	20		
7439-95-4	Magnesium	292	0.50	5.00	292	-11*	80 - 120	295	59*	1	20		
7440-23-5	Sodium	668	2.50	20.0	682	70*	80 - 120	694	129*	2	20		

General Chemistry Quality Control Summary

Analytical Batch 512404 Prep Batch N/A	Client ID MB512404 GCAL ID 1217127 Sample Type Method Blank Analytical Date 07/25/2013 10:50 Matrix Water	LCS512404 1217128 LCS 07/25/2013 10:50 Water				
SM 2540 C - 1997		Units mg/L Result RDL	Spike Added	Result	% R	Control Limits % R
WET-035	Total Dissolved Solids(TDS)	4.39U 4.39	1000	1060	106	90 - 110

Analytical Batch 512404 Prep Batch N/A	Client ID MW-08-04 GCAL ID 21307240701 Sample Type SAMPLE Analytical Date 07/25/2013 10:50 Matrix Water	1216725DUP 1217129 DUP 07/25/2013 10:50 Water			
SM 2540 C - 1997		Units mg/L Result RDL	Result	RPD	RPD Limit
WET-035	Total Dissolved Solids(TDS)	5590 4.39	5590	0	5

Analytical Batch 512404 Prep Batch N/A	Client ID U43010B GCAL ID 21307230803 Sample Type SAMPLE Analytical Date 07/25/2013 10:50 Matrix Water	1216201DUP 1217459 DUP 07/25/2013 10:50 Water			
SM 2540 C - 1997		Units mg/L Result RDL	Result	RPD	RPD Limit
WET-035	Total Dissolved Solids(TDS)	4650 4.39	4660	0	5

General Chemistry Quality Control Summary

Analytical Batch 512358 Prep Batch N/A	Client ID MB512358 GCAL ID 1216906 Sample Type Method Blank Analytical Date 07/24/2013 16:39 Matrix Water	LCS512358 1216907 LCS 07/24/2013 17:19 Water
EPA 300.0		Units mg/L Result RDL Spike Added Result % R Control Limits % R
14797-55-8 Nitrate	0.020U 0.020	2.50 2.62 105 80 - 120

Analytical Batch 512358 Prep Batch N/A	Client ID MW-08-04 GCAL ID 21307240701 Sample Type SAMPLE Analytical Date 07/24/2013 17:36 Matrix Water	1216725MS 1216908 MS 07/24/2013 17:54 Water	1216725MSD 1216909 MSD 07/24/2013 18:11 Water
EPA 300.0		Units mg/L Result RDL Spike Added Result % R Control Limits % R	Result % R RPD RPD Limit
14797-55-8 Nitrate	6.10 0.100	12.5 17.8 93 75 - 125	17.7 93 0 25



NATIONVIEW / 4771/213072407/8/2/13

Page: 1 of 1

NV Project No: 10-0004

COC Number(1): 07232013-1

LIMS Number:

Chain of Custody and Analytical Request

Facility/Base ID: Holloman Air Force Base, New Mexico								Sample Analysis Requested ⁽⁶⁾						Quality Assurance Samples ⁽⁶⁾		
Project/Site Name: SD-08 Quarterly Groundwater Sampling (Q7)								Number of containers	VOCs (82,60B)	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
Client Name: USACE Omaha District																
Collected by: Tony Lucero / Brian Parrish																
Field Sample ID (30 Character Max)	FRPMS LOC ID (15 Character Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (Mmm)	Sample Depth (beginning - end) (ft)	SA Code ⁽²⁾	Sample Number ⁽³⁾	Sample Matrix ⁽⁴⁾									
MW-08-04	MW-08-04	23-07-2013	835		N		WG	7	☑	☑	☑	☑	☑			
MW-08-08	MW-08-08	23-07-2013	935		N		WG	7	☑	☑	☑	☑	☑			
MW-08-05	MW-08-05	23-07-2013	1025		N		WG	7	☑	☑	☑	☑	☑			
S10-MW01	S10-MW01	23-07-2013	1120		N		WG	7	☑	☑	☑	☑	☑			
W01-A	S10-MW01-A	23-07-2013	1120		FD		WG	7	☑	☑	☑	☑	☑			
BLANK					TB		WQ	3	X*						HA3151020	

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COMMENTS: Dissolved TAL Metals filtered in the field

* added per client (SH) 7/24

3.4 E24

Custody Transfers Prior to Receipt by Laboratory				Sample Delivery Details / Laboratory Receipt			
Requested By (Signed)	Date	Time	Received by (Signed)	Date	Time	Delivered Directly to Lab:	Shipped No:
Bryan Parrish	07/23/2013	1400	Brian Parrish	7/24/13	945	Method of Shipment: Fed Ex	Airbill Number: 796294917033
Ted Ek						Analytical Lab: GCAL	Delivery Location: Baton Rouge, LA
						Lab Recipient:	Delivery Date/Time:

- Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
- 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)
- 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.)
- Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SD = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ = Soil Blanks
- Sample Analysis Requested: Analytical method requested and number of containers provided for each
- Quality assurance samples are assigned by date (ddmm) 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

NELAP CERTIFICATE NUMBER 01955
DOD ELAP CERTIFICATE NUMBER ADE - 1482

ANALYTICAL RESULTS

PERFORMED BY

GULF COAST ANALYTICAL LABORATORIES, INC.

7979 GSRI Avenue
Baton Rouge, LA 70820

Report Date 08/09/2013

GCAL Report 213073002



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

Attn Jim Moore

Project Holloman AFB

CASE NARRATIVE

Client: NationView LLC **Report:** 213073002

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 SW-846 8260B analysis for analytical batch 512809, the LCS/LCSD exhibited a marginal sporadic failure for Methyl Iodide. The LCS/LCSD RPDs are above the control limits for Bromomethane and Methyl Iodide.

METALS

In the SW-846 7470A analysis for prep batch 512738, the MSD and MS/MSD RPD recoveries are 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 SW-846 6010C analysis, all samples had to be diluted in order to bracket the concentration of Sodium within the linear dynamic range of the instrument.

In the SW-846 6010C Dissolved analysis for prep batch 512740, the MS/MSD recovery is outside the control limits for Potassium. 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 117%. The MS/MSD recoveries are not applicable for Calcium, Magnesium and Sodium because the sample concentration is greater than four times the spike concentration.

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.

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

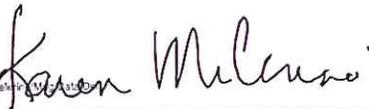
J	Indicates the result is between the MDL and RDL
U	Indicates the compound was analyzed for but not detected
B	Indicates the analyte was detected in the associated Method Blank

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.


Karen Melrose, Director

Authorized Signature

GCAL REPORT 213073002

THIS REPORT CONTAINS 42 PAGES.

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307300201	MW08-03	Water	07/29/2013 08:15	07/30/2013 09:25
21307300202	MW08-01	Water	07/29/2013 09:10	07/30/2013 09:25
21307300203	MW08-02	Water	07/29/2013 10:05	07/30/2013 09:25
21307300204	MW08-07	Water	07/29/2013 11:00	07/30/2013 09:25
21307300205	SWMU183-MW03	Water	07/29/2013 11:45	07/30/2013 09:25
21307300206	TRIP BLANK	Water	07/29/2013 00:00	07/30/2013 09:25

Summary of Compounds Detected

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307300201	MW08-03	Water	07/29/2013 08:15	07/30/2013 09:25

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.0039J	0.010	0.0025	mg/L
7440-70-2	Calcium	458	0.80	0.20	mg/L
7440-09-7	Potassium	20.1	0.50	0.13	mg/L
7440-62-2	Vanadium	0.029	0.020	0.0050	mg/L

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7439-95-4	Magnesium	588	0.20	0.050	mg/L

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	Sodium	2520	10.0	2.50	mg/L

EPA 300.0

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	10.8	10.0	0.400	mg/L

SM 2540 C - 1997

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	11700	10.0	4.39	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307300202	MW08-01	Water	07/29/2013 09:10	07/30/2013 09:25

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.0089J	0.010	0.0025	mg/L
7440-70-2	Calcium	387	0.80	0.20	mg/L
7439-96-5	Manganese	2.47	0.015	0.0038	mg/L
7440-09-7	Potassium	6.20	0.50	0.13	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307300202	MW08-01	Water	07/29/2013 09:10	07/30/2013 09:25

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7439-89-6	Iron	7.11	0.20	0.050	mg/L
7439-95-4	Magnesium	519	0.20	0.050	mg/L

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	Sodium	1780	10.0	2.50	mg/L

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
107-06-2	1,2-Dichloroethane	45.4	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	6.72	5.00	0.150	ug/L
67-64-1	Acetone	4.78J	5.00	0.193	ug/L
71-43-2	Benzene	0.778J	5.00	0.111	ug/L
100-41-4	Ethylbenzene	0.473J	5.00	0.109	ug/L
135-98-8	sec-Butylbenzene	0.604J	5.00	0.107	ug/L
98-06-6	tert-Butylbenzene	0.984J	5.00	0.087	ug/L

SM 2540 C - 1997

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	9100	10.0	4.39	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307300203	MW08-02	Water	07/29/2013 10:05	07/30/2013 09:25

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.012	0.010	0.0025	mg/L
7440-70-2	Calcium	470	0.80	0.20	mg/L
7439-96-5	Manganese	1.08	0.015	0.0038	mg/L
7440-09-7	Potassium	3.78	0.50	0.13	mg/L

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7439-89-6	Iron	0.90	0.20	0.050	mg/L
7439-95-4	Magnesium	155	0.20	0.050	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307300203	MW08-02	Water	07/29/2013 10:05	07/30/2013 09:25

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	Sodium	193	10.0	2.50	mg/L

SM 2540 C - 1997

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	3710	10.0	4.39	mg/L

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
107-06-2	1,2-Dichloroethane	10.8	5.00	0.116	ug/L
98-06-6	tert-Butylbenzene	0.349J	5.00	0.087	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307300204	MW08-07	Water	07/29/2013 11:00	07/30/2013 09:25

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.025	0.020	0.0050	mg/L
7440-39-3	Barium	0.010	0.010	0.0025	mg/L
7439-96-5	Manganese	1.16	0.015	0.0038	mg/L
7440-09-7	Potassium	5.54	0.50	0.13	mg/L
7440-62-2	Vanadium	0.014J	0.020	0.0050	mg/L
7440-66-6	Zinc	0.0061J	0.020	0.0050	mg/L

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-70-2	Calcium	545	0.80	0.20	mg/L
7439-95-4	Magnesium	168	0.20	0.050	mg/L

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	Sodium	429	10.0	2.50	mg/L

EPA 300.0

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	1.69J	5.00	0.200	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307300204	MW08-07	Water	07/29/2013 11:00	07/30/2013 09:25

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
107-06-2	1,2-Dichloroethane	39.9	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	1.12J	5.00	0.150	ug/L

SM 2540 C - 1997

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	4180	10.0	4.39	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307300205	SWMU183-MW03	Water	07/29/2013 11:45	07/30/2013 09:25

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.011	0.010	0.0025	mg/L
7439-96-5	Manganese	1.13	0.015	0.0038	mg/L
7440-09-7	Potassium	7.98	0.50	0.13	mg/L
7440-62-2	Vanadium	0.015J	0.020	0.0050	mg/L
7440-66-6	Zinc	0.0053J	0.020	0.0050	mg/L

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-70-2	Calcium	482	0.80	0.20	mg/L
7439-95-4	Magnesium	230	0.20	0.050	mg/L

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	Sodium	1110	10.0	2.50	mg/L

SM 2540 C - 1997

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	6430	10.0	4.39	mg/L

EPA 300.0

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	24.2	10.0	0.400	mg/L

GCAL ID 21307300201	Client ID MW08-03	Matrix Water	Collect Date/Time 07/29/2013 08:15	Receive Date/Time 07/30/2013 09:25
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SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 07/31/2013 11:15	By JCK	Analytical Batch 512809
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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 21307300201	Client ID MW08-03	Matrix Water	Collect Date/Time 07/29/2013 08:15	Receive Date/Time 07/30/2013 09:25
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SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	07/31/2013 11:15	JCK	512809

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	48.6	ug/L	97	84 - 120
1868-53-7	Dibromofluoromethane	50	49	ug/L	98	87 - 116
2037-26-5	Toluene d8	50	50.9	ug/L	102	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
07/30/2013 13:15	512738	SW-846 7470A Dissolved	1	07/31/2013 13:05	CMB	512807

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.00020	0.000068	mg/L

SW-846 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/30/2013 13:15	512738	SW-846 7470A	1	07/31/2013 13:07	CMB	512807

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.00020	0.000068	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307300201	MW08-03	Water	07/29/2013 08:15	07/30/2013 09:25

SW-846 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/30/2013 13:15	512740	SW-846 3005 Dissolved	10	08/02/2013 19:04	BAM	512987

CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	Sodium	2520	10.0	2.50	mg/L

SW-846 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/30/2013 13:15	512740	SW-846 3005 Dissolved	1	08/05/2013 19:57	BAM	513144

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	0.0039J	0.010	0.0025	mg/L
7440-41-7	Beryllium	0.0010U	0.0040	0.0010	mg/L
7440-70-2	Calcium	458	0.80	0.20	mg/L
7440-47-3	Chromium	0.0025U	0.010	0.0025	mg/L
7440-48-4	Cobalt	0.0025U	0.010	0.0025	mg/L
7440-50-8	Copper	0.0050U	0.020	0.0050	mg/L
7439-92-1	Lead	0.0038U	0.015	0.0038	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	20.1	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
7440-28-0	Thallium	0.0050U	0.020	0.0050	mg/L
7440-62-2	Vanadium	0.029	0.020	0.0050	mg/L
7440-66-6	Zinc	0.0050U	0.020	0.0050	mg/L

SW-846 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/30/2013 13:15	512740	SW-846 3005 Dissolved	1	08/06/2013 19:25	BAM	513225

CAS#	Parameter	Result	RDL	MDL	Units
7439-89-6	Iron	0.050U	0.20	0.050	mg/L
7439-95-4	Magnesium	588	0.20	0.050	mg/L

SW-846 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
08/08/2013 12:00	513121	SW-846 3005 Dissolved	1	08/09/2013 00:45	BAM	513395

CAS#	Parameter	Result	RDL	MDL	Units
7440-43-9	Cadmium	0.0013U	0.0050	0.0013	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307300201	MW08-03	Water	07/29/2013 08:15	07/30/2013 09:25

SM 2540 C - 1997

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	08/02/2013 16:59	AEL	513010
CAS#	Parameter		Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)		11700	10.0	4.39	mg/L

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			20	07/30/2013 18:46	MCP	512735
CAS#	Parameter		Result	RDL	MDL	Units
14797-55-8	Nitrate		10.8	10.0	0.400	mg/L

GCAL ID 21307300202	Client ID MW08-01	Matrix Water	Collect Date/Time 07/29/2013 09:10	Receive Date/Time 07/30/2013 09:25
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SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	07/31/2013 11:35	JCK	512809
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		45.4	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		6.72	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		4.78J	5.00	0.193	ug/L
71-43-2	Benzene		0.778J	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		0.473J	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
21307300202	MW08-01	Water	07/29/2013 09:10	07/30/2013 09:25

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	07/31/2013 11:35	JCK	512809

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	0.604J	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	0.984J	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	48.3	ug/L	97	84 - 120
1868-53-7	Dibromofluoromethane	50	48.1	ug/L	96	87 - 116
2037-26-5	Toluene d8	50	49.7	ug/L	99	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	50.3	ug/L	101	76 - 127

SW-846 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/30/2013 13:15	512738	SW-846 7470A Dissolved	1	07/31/2013 13:08	CMB	512807

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.00020	0.000068	mg/L

SW-846 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/30/2013 13:15	512738	SW-846 7470A	1	07/31/2013 13:10	CMB	512807

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.00020	0.000068	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307300202	MW08-01	Water	07/29/2013 09:10	07/30/2013 09:25

SW-846 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/30/2013 13:15	512740	SW-846 3005 Dissolved	10	08/02/2013 19:37	BAM	512987
CAS#	Parameter	Result	RDL	MDL	Units	
7440-23-5	Sodium	1780	10.0	2.50	mg/L	

SW-846 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/30/2013 13:15	512740	SW-846 3005 Dissolved	1	08/05/2013 20:31	BAM	513144
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	0.0089J	0.010	0.0025	mg/L	
7440-41-7	Beryllium	0.0010U	0.0040	0.0010	mg/L	
7440-70-2	Calcium	387	0.80	0.20	mg/L	
7440-47-3	Chromium	0.0025U	0.010	0.0025	mg/L	
7440-48-4	Cobalt	0.0025U	0.010	0.0025	mg/L	
7440-50-8	Copper	0.0050U	0.020	0.0050	mg/L	
7439-92-1	Lead	0.0038U	0.015	0.0038	mg/L	
7439-96-5	Manganese	2.47	0.015	0.0038	mg/L	
7440-02-0	Nickel	0.010U	0.040	0.010	mg/L	
7440-09-7	Potassium	6.20	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	
7440-28-0	Thallium	0.0050U	0.020	0.0050	mg/L	
7440-62-2	Vanadium	0.0050U	0.020	0.0050	mg/L	
7440-66-6	Zinc	0.0050U	0.020	0.0050	mg/L	

SW-846 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/30/2013 13:15	512740	SW-846 3005 Dissolved	1	08/06/2013 20:08	BAM	513225
CAS#	Parameter	Result	RDL	MDL	Units	
7439-89-6	Iron	7.11	0.20	0.050	mg/L	
7439-95-4	Magnesium	519	0.20	0.050	mg/L	

SW-846 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
08/08/2013 12:00	513121	SW-846 3005 Dissolved	1	08/08/2013 23:22	BAM	513395
CAS#	Parameter	Result	RDL	MDL	Units	
7440-43-9	Cadmium	0.0013U	0.0050	0.0013	mg/L	

GCAL ID 21307300202	Client ID MW08-01	Matrix Water	Collect Date/Time 07/29/2013 09:10	Receive Date/Time 07/30/2013 09:25
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SM 2540 C - 1997

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	08/02/2013 16:59	AEL	513010
CAS#	Parameter		Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)		9100	10.0	4.39	mg/L

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	07/30/2013 19:03	MCP	512735
CAS#	Parameter		Result	RDL	MDL	Units
14797-55-8	Nitrate		0.200U	5.00	0.200	mg/L

GCAL ID 21307300203	Client ID MW08-02	Matrix Water	Collect Date/Time 07/29/2013 10:05	Receive Date/Time 07/30/2013 09:25
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SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 07/31/2013 11:55	By JCK	Analytical Batch 512809
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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-Dichloroethane	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	10.8	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
21307300203	MW08-02	Water	07/29/2013 10:05	07/30/2013 09:25

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	07/31/2013 11:55	JCK	512809

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	0.349J	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	49.3	ug/L	99	84 - 120
1868-53-7	Dibromofluoromethane	50	48.3	ug/L	97	87 - 116
2037-26-5	Toluene d8	50	51.1	ug/L	102	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	49.7	ug/L	99	76 - 127

SW-846 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/30/2013 13:15	512738	SW-846 7470A Dissolved	1	07/31/2013 12:50	CMB	512807

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.00020	0.000068	mg/L

SW-846 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/30/2013 13:15	512738	SW-846 7470A	1	07/31/2013 12:54	CMB	512807

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.00020	0.000068	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307300203	MW08-02	Water	07/29/2013 10:05	07/30/2013 09:25

SW-846 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/30/2013 13:15	512740	SW-846 3005 Dissolved	10	08/02/2013 19:50	BAM	512987
CAS#	Parameter	Result	RDL	MDL	Units	
7440-23-5	Sodium	193	10.0	2.50	mg/L	

SW-846 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/30/2013 13:15	512740	SW-846 3005 Dissolved	1	08/05/2013 20:37	BAM	513144
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	0.012	0.010	0.0025	mg/L	
7440-41-7	Beryllium	0.0010U	0.0040	0.0010	mg/L	
7440-70-2	Calcium	470	0.80	0.20	mg/L	
7440-47-3	Chromium	0.0025U	0.010	0.0025	mg/L	
7440-48-4	Cobalt	0.0025U	0.010	0.0025	mg/L	
7440-50-8	Copper	0.0050U	0.020	0.0050	mg/L	
7439-92-1	Lead	0.0038U	0.015	0.0038	mg/L	
7439-96-5	Manganese	1.08	0.015	0.0038	mg/L	
7440-02-0	Nickel	0.010U	0.040	0.010	mg/L	
7440-09-7	Potassium	3.78	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	
7440-28-0	Thallium	0.0050U	0.020	0.0050	mg/L	
7440-62-2	Vanadium	0.0050U	0.020	0.0050	mg/L	
7440-66-6	Zinc	0.0050U	0.020	0.0050	mg/L	

SW-846 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/30/2013 13:15	512740	SW-846 3005 Dissolved	1	08/06/2013 20:22	BAM	513225
CAS#	Parameter	Result	RDL	MDL	Units	
7439-89-6	Iron	0.90	0.20	0.050	mg/L	
7439-95-4	Magnesium	155	0.20	0.050	mg/L	

SW-846 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
08/08/2013 12:00	513121	SW-846 3005 Dissolved	1	08/09/2013 00:59	BAM	513395
CAS#	Parameter	Result	RDL	MDL	Units	
7440-43-9	Cadmium	0.0013U	0.0050	0.0013	mg/L	

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307300203	MW08-02	Water	07/29/2013 10:05	07/30/2013 09:25

SM 2540 C - 1997

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	07/30/2013 15:30	DJH	512765

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	3710	10.0	4.39	mg/L

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			5	07/30/2013 19:21	MCP	512735

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	0.100U	2.50	0.100	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307300204	MW08-07	Water	07/29/2013 11:00	07/30/2013 09:25

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	07/31/2013 12:15	JCK	512809

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	39.9	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	1.12J	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
21307300204	MW08-07	Water	07/29/2013 11:00	07/30/2013 09:25

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	07/31/2013 12:15	JCK	512809

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	48.8	ug/L	98	84 - 120
1868-53-7	Dibromofluoromethane	50	48.2	ug/L	96	87 - 116
2037-26-5	Toluene d8	50	50.7	ug/L	101	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	48.9	ug/L	98	76 - 127

SW-846 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/30/2013 13:15	512738	SW-846 7470A Dissolved	1	07/31/2013 13:12	CMB	512807

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.00020	0.000068	mg/L

SW-846 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/30/2013 13:15	512738	SW-846 7470A	1	07/31/2013 13:14	CMB	512807

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.00020	0.000068	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307300204	MW08-07	Water	07/29/2013 11:00	07/30/2013 09:25

SW-846 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/30/2013 13:15	512740	SW-846 3005 Dissolved	10	08/02/2013 20:17	BAM	512987
CAS#	Parameter	Result	RDL	MDL	Units	
7440-23-5	Sodium	429	10.0	2.50	mg/L	

SW-846 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/30/2013 13:15	512740	SW-846 3005 Dissolved	1	08/05/2013 20:58	BAM	513144
CAS#	Parameter	Result	RDL	MDL	Units	
7440-36-0	Antimony	0.015U	0.060	0.015	mg/L	
7440-38-2	Arsenic	0.025	0.020	0.0050	mg/L	
7440-39-3	Barium	0.010	0.010	0.0025	mg/L	
7440-41-7	Beryllium	0.0010U	0.0040	0.0010	mg/L	
7440-47-3	Chromium	0.0025U	0.010	0.0025	mg/L	
7440-48-4	Cobalt	0.0025U	0.010	0.0025	mg/L	
7440-50-8	Copper	0.0050U	0.020	0.0050	mg/L	
7439-92-1	Lead	0.0038U	0.015	0.0038	mg/L	
7439-96-5	Manganese	1.16	0.015	0.0038	mg/L	
7440-02-0	Nickel	0.010U	0.040	0.010	mg/L	
7440-09-7	Potassium	5.54	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	
7440-28-0	Thallium	0.0050U	0.020	0.0050	mg/L	
7440-62-2	Vanadium	0.014J	0.020	0.0050	mg/L	
7440-66-6	Zinc	0.0061J	0.020	0.0050	mg/L	

SW-846 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/30/2013 13:15	512740	SW-846 3005 Dissolved	1	08/06/2013 20:51	BAM	513225
CAS#	Parameter	Result	RDL	MDL	Units	
7429-90-5	Aluminum	0.050U	0.20	0.050	mg/L	
7440-70-2	Calcium	545	0.80	0.20	mg/L	
7439-89-6	Iron	0.050U	0.20	0.050	mg/L	
7439-95-4	Magnesium	168	0.20	0.050	mg/L	

SW-846 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
08/08/2013 12:00	513121	SW-846 3005 Dissolved	1	08/09/2013 01:13	BAM	513395
CAS#	Parameter	Result	RDL	MDL	Units	
7440-43-9	Cadmium	0.0013U	0.0050	0.0013	mg/L	

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307300204	MW08-07	Water	07/29/2013 11:00	07/30/2013 09:25

SM 2540 C - 1997

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	08/02/2013 16:59	AEL	513010

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	4180	10.0	4.39	mg/L

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	07/30/2013 19:38	MCP	512735

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	1.69J	5.00	0.200	mg/L

GCAL ID 21307300205	Client ID SWMU183-MW03	Matrix Water	Collect Date/Time 07/29/2013 11:45	Receive Date/Time 07/30/2013 09:25
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SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 07/31/2013 10:55	By JCK	Analytical Batch 512809
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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
21307300205	SWMU183-MW03	Water	07/29/2013 11:45	07/30/2013 09:25

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	07/31/2013 10:55	JCK	512809

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	ug/L	98	84 - 120
1868-53-7	Dibromofluoromethane	50	49.2	ug/L	98	87 - 116
2037-26-5	Toluene d8	50	50.7	ug/L	101	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	49.8	ug/L	100	76 - 127

SW-846 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/30/2013 13:15	512738	SW-846 7470A Dissolved	1	07/31/2013 13:16	CMB	512807

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.00020	0.000068	mg/L

SW-846 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/30/2013 13:15	512738	SW-846 7470A	1	07/31/2013 13:17	CMB	512807

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.00020	0.000068	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307300205	SWMU183-MW03	Water	07/29/2013 11:45	07/30/2013 09:25

SW-846 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/30/2013 13:15	512740	SW-846 3005 Dissolved	10	08/02/2013 20:30	BAM	512987
CAS#	Parameter	Result	RDL	MDL	Units	
7440-23-5	Sodium	1110	10.0	2.50	mg/L	

SW-846 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/30/2013 13:15	512740	SW-846 3005 Dissolved	1	08/05/2013 21:05	BAM	513144
CAS#	Parameter	Result	RDL	MDL	Units	
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	0.011	0.010	0.0025	mg/L	
7440-41-7	Beryllium	0.0010U	0.0040	0.0010	mg/L	
7440-47-3	Chromium	0.0025U	0.010	0.0025	mg/L	
7440-48-4	Cobalt	0.0025U	0.010	0.0025	mg/L	
7440-50-8	Copper	0.0050U	0.020	0.0050	mg/L	
7439-92-1	Lead	0.0038U	0.015	0.0038	mg/L	
7439-96-5	Manganese	1.13	0.015	0.0038	mg/L	
7440-02-0	Nickel	0.010U	0.040	0.010	mg/L	
7440-09-7	Potassium	7.98	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	
7440-28-0	Thallium	0.0050U	0.020	0.0050	mg/L	
7440-62-2	Vanadium	0.015J	0.020	0.0050	mg/L	
7440-66-6	Zinc	0.0053J	0.020	0.0050	mg/L	

SW-846 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
07/30/2013 13:15	512740	SW-846 3005 Dissolved	1	08/06/2013 21:33	BAM	513225
CAS#	Parameter	Result	RDL	MDL	Units	
7429-90-5	Aluminum	0.050U	0.20	0.050	mg/L	
7440-70-2	Calcium	482	0.80	0.20	mg/L	
7439-89-6	Iron	0.050U	0.20	0.050	mg/L	
7439-95-4	Magnesium	230	0.20	0.050	mg/L	

SW-846 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
08/08/2013 12:00	513121	SW-846 3005 Dissolved	1	08/09/2013 01:27	BAM	513395
CAS#	Parameter	Result	RDL	MDL	Units	
7440-43-9	Cadmium	0.0013U	0.0050	0.0013	mg/L	

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307300205	SWMU183-MW03	Water	07/29/2013 11:45	07/30/2013 09:25

SM 2540 C - 1997

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	07/30/2013 15:30	DJH	512765
CAS#	Parameter		Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)		6430	10.0	4.39	mg/L

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			20	07/31/2013 08:42	MCP	512735
CAS#	Parameter		Result	RDL	MDL	Units
14797-55-8	Nitrate		24.2	10.0	0.400	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21307300206	TRIP BLANK	Water	07/29/2013 00:00	07/30/2013 09:25

SW-846 8260B Water

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	07/31/2013 10:35	AMD	512809

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 21307300206	Client ID TRIP BLANK	Matrix Water	Collect Date/Time 07/29/2013 00:00	Receive Date/Time 07/30/2013 09:25
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SW-846 8260B Water

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 07/31/2013 10:35	By AMD	Analytical Batch 512809
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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	48.8	ug/L	98	84 - 120
1868-53-7	Dibromofluoromethane	50	48.8	ug/L	98	87 - 116
2037-26-5	Toluene d8	50	50.1	ug/L	100	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	49.7	ug/L	99	76 - 127

GC/MS Volatiles Quality Control Summary

Analytical Batch 512809 Prep Batch N/A		Client ID GCAL ID 1219147 Sample Type Method Blank Analytical Date 07/31/2013 10:14 Matrix Water		LCSS512809 1223333 LCS 07/31/2013 08:00 Water			LCSD512809 1219149 LCSD 07/31/2013 08:57 Water				
SW-846 8260B		Units Result	ug/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	RPD Limit
67-64-1	Acetone	0.193U	0.193	50.0	36.4	73	59 - 134	40.5	81	11	30
74-97-5	Bromochloromethane	0.127U	0.127	50.0	47.4	95	78 - 112	55.2	110	15	30
75-27-4	Bromodichloromethane	0.083U	0.083	50.0	46.0	92	76 - 116	53.5	107	15	30
75-25-2	Bromoform	0.215U	0.215	50.0	39.2	78	68 - 128	45.3	91	14	30
74-83-9	Bromomethane	0.427U	0.427	50.0	39.8	80	55 - 151	56.4	113	35*	30
75-15-0	Carbon disulfide	0.190U	0.190	50.0	51.2	102	67 - 147	57.9	116	12	30
56-23-5	Carbon tetrachloride	0.248U	0.248	50.0	52.0	104	74 - 139	58.4	117	12	30
75-00-3	Chloroethane	0.235U	0.235	50.0	53.2	106	54 - 166	59.8	120	12	30
136777-61-2	m,p-Xylene	0.123U	0.123	100	93.9	94	83 - 121	107	107	13	30
67-66-3	Chloroform	0.155U	0.155	50.0	46.0	92	85 - 123	53.3	107	15	30
74-87-3	Chloromethane	0.144U	0.144	50.0	42.0	84	55 - 173	48.7	97	15	30
124-48-1	Dibromochloromethane	0.054U	0.054	50.0	43.7	87	74 - 116	50.4	101	14	30
74-95-3	Dibromomethane	0.211U	0.211	50.0	44.3	89	81 - 116	50.5	101	13	30
75-71-8	Dichlorodifluoromethane	0.145U	0.145	50.0	51.4	103	34 - 158	56.0	112	9	30
75-34-3	1,1-Dichloroethane	0.171U	0.171	50.0	47.8	96	82 - 127	54.1	108	12	30
107-06-2	1,2-Dichloroethane	0.116U	0.116	50.0	43.5	87	76 - 122	50.5	101	15	30
156-59-2	cis-1,2-Dichloroethene	0.103U	0.103	50.0	48.2	96	81 - 114	55.0	110	13	30
156-60-5	trans-1,2-Dichloroethene	0.077U	0.077	50.0	49.0	98	82 - 126	55.1	110	12	30
75-09-2	Methylene chloride	0.149U	0.149	50.0	45.7	91	69 - 125	53.0	106	15	30
78-87-5	1,2-Dichloropropane	0.150U	0.150	50.0	46.6	93	81 - 120	54.0	108	15	30
10061-01-5	cis-1,3-Dichloropropene	0.124U	0.124	50.0	46.3	93	83 - 119	54.7	109	17	30
10061-02-6	trans-1,3-Dichloropropene	0.128U	0.128	50.0	45.8	92	87 - 123	53.5	107	16	30
100-41-4	Ethylbenzene	0.109U	0.109	50.0	48.1	96	87 - 118	53.9	108	11	30
591-78-6	2-Hexanone	0.122U	0.122	50.0	33.9	68	58 - 125	38.9	78	14	30
98-82-8	Isopropylbenzene (Cumene)	0.130U	0.130	50.0	50.7	101	87 - 131	57.5	115	13	30
78-93-3	2-Butanone	0.142U	0.142	50.0	35.2	70	61 - 127	39.2	78	11	30
74-88-4	Methyl iodide	0.084U	0.084	50.0	34.2	68*	72 - 125	51.2	102	40*	30
108-10-1	4-Methyl-2-pentanone	0.120U	0.120	50.0	35.9	72	62 - 125	40.8	82	13	30
103-65-1	n-Propylbenzene	0.727U	0.727	50.0	51.5	103	86 - 125	58.8	118	13	30
100-42-5	Styrene	0.089U	0.089	50.0	48.8	98	78 - 118	56.5	113	15	30
127-18-4	Tetrachloroethene	0.193U	0.193	50.0	50.1	100	80 - 131	56.3	113	12	30
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	0.120	50.0	45.4	91	81 - 119	52.0	104	14	30
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	0.109	50.0	42.1	84	71 - 120	47.8	96	13	30

GC/MS Volatiles Quality Control Summary

Analytical Batch	Client ID	MB512809	LCS512809	LCSD512809							
512809	1219147	1219147	1223333	1219149							
Prep Batch N/A	Sample Type	Method Blank	LCS	LCSO							
	Analytical Date	07/31/2013 10:14	07/31/2013 08:00	07/31/2013 08:57							
	Matrix	Water	Water	Water							
SW-846 8260B		Units	ug/L	Spike	Result	% R	Control	Result	% R	RPD	RPD
		Result	RDL	Added			Limits % R			Limit	Limit
120-82-1	1,2,4-Trichlorobenzene	0.105U	0.105	50.0	43.0	86	68 - 123	52.0	104	19	30
71-55-6	1,1,1-Trichloroethane	0.123U	0.123	50.0	48.7	97	79 - 133	55.5	111	13	30
79-00-5	1,1,2-Trichloroethane	0.159U	0.159	50.0	43.1	86	80 - 114	49.6	99	14	30
75-69-4	Trichlorofluoromethane	0.157U	0.157	50.0	46.6	93	66 - 156	51.9	104	11	30
96-18-4	1,2,3-Trichloropropane	0.065U	0.065	50.0	40.1	80	77 - 115	46.0	92	14	30
95-63-6	1,2,4-Trimethylbenzene	0.084U	0.084	50.0	50.9	102	82 - 120	59.0	118	15	30
108-67-8	1,3,5-Trimethylbenzene	0.066U	0.066	50.0	51.6	103	83 - 123	59.5	119	14	30
75-01-4	Vinyl chloride	0.127U	0.127	50.0	51.7	103	57 - 153	57.4	115	10	30
95-47-6	o-Xylene	0.055U	0.055	50.0	46.8	94	83 - 121	53.7	107	14	30
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	0.194	50.0	36.0	72	61 - 118	42.7	85	17	30
106-93-4	1,2-Dibromoethane	0.102U	0.102	50.0	42.4	85	80 - 115	49.0	98	14	30
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	0.078	50.0	42.7	85	75 - 116	49.5	99	15	30
540-59-0	1,2-Dichloroethene(Total)	0.180U	0.180	100	97.2	97	74 - 128	110	110	12	30
99-87-6	4-Isopropyltoluene	0.070U	0.070	50.0	54.5	109	83 - 125	61.8	124	13	30
1330-20-7	Xylene (total)	0.179U	0.179	150	141	94	74 - 127	160	107	13	30
110-57-6	trans-1,4-Dichloro-2-butene	0.264U	0.264	50.0	37.8	76	51 - 137	43.6	87	14	30
594-20-7	2,2-Dichloropropane	0.170U	0.170	50.0	50.8	102	77 - 138	57.8	116	13	30
76-13-1	Trichlorotrifluoroethane	0.158U	0.158	50.0	52.6	105	74 - 139	57.8	116	9	30
563-58-6	1,1-Dichloropropene	0.052U	0.052	50.0	50.4	101	87 - 127	56.1	112	11	30
142-28-9	1,3-Dichloropropane	0.059U	0.059	50.0	43.6	87	81 - 113	49.3	99	12	30
108-86-1	Bromobenzene	0.145U	0.145	50.0	45.5	91	83 - 115	53.1	106	15	30
95-49-8	2-Chlorotoluene	0.080U	0.080	50.0	48.7	97	81 - 121	55.9	112	14	30
106-43-4	4-Chlorotoluene	0.124U	0.124	50.0	48.8	98	84 - 120	56.4	113	14	30
98-06-6	tert-Butylbenzene	0.087U	0.087	50.0	53.2	106	83 - 126	60.6	121	13	30
135-98-8	sec-Butylbenzene	0.107U	0.107	50.0	54.6	109	86 - 127	61.3	123	12	30
541-73-1	1,3-Dichlorobenzene	0.138U	0.138	50.0	47.0	94	86 - 115	54.6	109	15	30
106-46-7	1,4-Dichlorobenzene	0.083U	0.083	50.0	45.4	91	87 - 113	52.7	105	15	30
104-51-8	n-Butylbenzene	0.123U	0.123	50.0	54.6	109	84 - 124	61.6	123	12	30
95-50-1	1,2-Dichlorobenzene	0.135U	0.135	50.0	44.6	89	85 - 115	53.0	106	17	30
87-68-3	Hexachlorobutadiene	0.265U	0.265	50.0	49.3	99	71 - 133	58.1	116	16	30
91-20-3	Naphthalene	0.176U	0.176	50.0	35.7	71	59 - 125	46.5	93	26	35
75-35-4	1,1-Dichloroethene	0.208U	0.208	50.0	49.0	98	75 - 133	55.8	112	13	20
71-43-2	Benzene	0.111U	0.111	50.0	46.6	93	83 - 124	53.2	106	13	20

GC/MS Volatiles Quality Control Summary

Analytical Batch 512809 Prep Batch N/A		Client ID MB512809 GCAL ID 1219147 Sample Type Method Blank Analytical Date 07/31/2013 10:14 Matrix Water			LCS512809 1223333 LCS 07/31/2013 08:00 Water			LCSD512809 1219149 LCSD 07/31/2013 08:57 Water			
SW-846 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	45.0	90	85 - 124	51.5	103	13	20
108-88-3	Toluene	0.122U	0.122	50.0	46.3	93	86 - 116	52.7	105	13	20
108-90-7	Chlorobenzene	0.083U	0.083	50.0	45.2	90	87 - 115	52.1	104	14	20
Surrogate											
460-00-4	4-Bromofluorobenzene	48.9	98	50	48.9	98	84 - 120	48.5	97		
1868-53-7	Dibromofluoromethane	49.2	98	50	50.5	101	87 - 116	49.3	99		
2037-26-5	Toluene d8	51.3	103	50	49.8	100	86 - 112	48.9	98		
17060-07-0	1,2-Dichloroethane-d4	49.2	98	50	49.5	99	76 - 127	48.7	97		

Inorganics Quality Control Summary

Analytical Batch 512807 Prep Batch 512738 Prep Method SW-846 7470A	Client ID GCAL ID Sample Type Prep Date Analytical Date Matrix	MB512738 1218740 Method Blank 07/30/2013 13:15 07/31/2013 12:46 Water	LCS512738 1218741 LCS 07/30/2013 13:15 07/31/2013 12:48 Water				
SW-846 7470A		Units Result	mg/L RDL	Spike Added	Result	% R	Control Limits % R
7439-97-6	Mercury	0.000068U	0.000068	0.0025	0.0024	95	88 - 111

Analytical Batch 512807 Prep Batch 512738 Prep Method SW-846 7470A	Client ID GCAL ID Sample Type Prep Date Analytical Date Matrix	MW08-02 21307300203 SAMPLE 07/30/2013 13:15 07/31/2013 12:54 Water	1218699MS 1218742 MS 07/30/2013 13:15 07/31/2013 12:56 Water	1218699MSD 1218743 MSD 07/30/2013 13:15 07/31/2013 12:58 Water							
SW-846 7470A		Units Result	mg/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	RPD Limit
7439-97-6	Mercury	0.0	0.000068	0.0025	0.0026	105	80 - 120	0.0018	71'	39'	10

Inorganics Quality Control Summary

Analytical Batch	Client ID	MB512740	LCS512740				
512987	1218748						
Prep Batch 512740	GCAL ID	1218748	1218749				
Prep Method SW-846 3005	Sample Type	Method Blank	LCS				
Dissolved	Prep Date	07/30/2013 13:15	07/30/2013 13:15				
	Analytical Date	08/02/2013 17:37	08/02/2013 17:44				
	Matrix	Water	Water				
SW-846 6010C Dissolved		Units	mg/L	Spike	Result	% R	Control
		Result	RDL	Added			Limits % R
7429-90-5	Aluminum	0.050U	0.050	5.00	4.80	96	80 - 120
7440-36-0	Antimony	0.015U	0.015	0.50	0.52	104	80 - 120
7440-38-2	Arsenic	0.0050U	0.0050	0.50	0.40	80	80 - 120
7440-39-3	Barium	0.0025U	0.0025	0.50	0.50	100	80 - 120
7440-41-7	Beryllium	0.0010U	0.0010	0.50	0.50	101	80 - 120
7440-70-2	Calcium	0.38J	0.20	5.00	5.10	102	80 - 120
7440-47-3	Chromium	0.0025U	0.0025	0.50	0.50	100	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	0.51	102	80 - 120
7439-89-6	Iron	0.050U	0.050	5.00	4.72	94	80 - 120
7439-92-1	Lead	0.0038U	0.0038	0.50	0.40	81	80 - 120
7439-95-4	Magnesium	0.050U	0.050	5.00	4.75	95	80 - 120
7439-96-5	Manganese	0.0038U	0.0038	0.50	0.50	100	80 - 120
7440-02-0	Nickel	0.010U	0.010	0.50	0.51	103	80 - 120
7440-09-7	Potassium	0.13U	0.13	10.0	9.99	100	80 - 120
7782-49-2	Selenium	0.010U	0.010	0.50	0.41	82	80 - 120
7440-22-4	Silver	0.0025U	0.0025	0.50	0.51	101	80 - 120
7440-23-5	Sodium	0.25U	0.25	20.0	19.9	99	80 - 120
7440-28-0	Thallium	0.0050U	0.0050	0.50	0.49	98	80 - 120
7440-62-2	Vanadium	0.0050U	0.0050	0.50	0.50	99	80 - 120
7440-66-6	Zinc	0.0098J	0.0050	0.50	0.52	104	80 - 120

Analytical Batch	Client ID	MW08-03	1218697MS	1218697MSD							
512987	21307300201		1218750	1218751							
Prep Batch 512740	Sample Type	SAMPLE	MS	MSD							
Prep Method SW-846 3005	Prep Date	07/30/2013 13:15	07/30/2013 13:15	07/30/2013 13:15							
Dissolved	Analytical Date	08/02/2013 19:04	08/02/2013 19:10	08/02/2013 19:17							
	Matrix	Water	Water	Water							
SW-846 6010C Dissolved		Units	mg/L	Spike	Result	% R	Control	Result	% R	RPD	RPD
		Result	RDL	Added			Limits % R				Limit
7440-23-5	Sodium	2520	2.50	20.0	2530	51*	80 - 120	2510	-59*	1	20

Inorganics Quality Control Summary

Analytical Batch 513144 Prep Batch 512740 Prep Method SW-846 3005 Dissolved		Client ID MW08-03 GCAL ID 21307300201 Sample Type SAMPLE Prep Date 07/30/2013 13:15 Analytical Date 08/05/2013 19:57 Matrix Water		1218697MS 1218750 MS 07/30/2013 13:15 08/05/2013 20:04 Water			1218697MSD 1218751 MSD 07/30/2013 13:15 08/05/2013 20:11 Water						
SW-846 6010C Dissolved				Units Result	mg/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	RPD Limit
7429-90-5	Aluminum	0.0	0.050	5.00	4.59	92	80 - 120	4.51	90	2	20		
7440-36-0	Antimony	0.0	0.015	0.50	0.56	112	80 - 120	0.55	109	3	20		
7440-38-2	Arsenic	0.0	0.0050	0.50	0.55	111	80 - 120	0.54	109	2	20		
7440-39-3	Barium	0.0039	0.0025	0.50	0.48	95	80 - 120	0.47	94	1	20		
7440-41-7	Beryllium	0.0	0.0010	0.50	0.47	95	80 - 120	0.46	92	2	20		
7440-70-2	Calcium	458	0.20	5.00	462	86	80 - 120	458	7*	1	20		
7440-47-3	Chromium	0.0	0.0025	0.50	0.46	92	80 - 120	0.45	90	2	20		
7440-48-4	Cobalt	0.0	0.0025	0.50	0.46	93	80 - 120	0.47	94	1	20		
7440-50-8	Copper	0.0	0.0050	0.50	0.49	98	80 - 120	0.49	97	1	20		
7439-92-1	Lead	0.0	0.0038	0.50	0.44	87	80 - 120	0.43	85	2	20		
7439-96-5	Manganese	0.0	0.0038	0.50	0.47	95	80 - 120	0.47	94	1	20		
7440-02-0	Nickel	0.0	0.010	0.50	0.44	88	80 - 120	0.44	87	1	20		
7440-09-7	Potassium	20.1	0.13	10.0	33.8	137*	80 - 120	33.6	135*	1	20		
7782-49-2	Selenium	0.0	0.010	0.50	0.54	108	80 - 120	0.54	108	0	20		
7440-22-4	Silver	0.0	0.0025	0.50	0.52	103	80 - 120	0.51	102	1	20		
7440-28-0	Thallium	0.0	0.0050	0.50	0.43	86	80 - 120	0.42	84	3	20		
7440-62-2	Vanadium	0.029	0.0050	0.50	0.53	100	80 - 120	0.52	99	1	20		
7440-66-6	Zinc	0.0	0.0050	0.50	0.51	101	80 - 120	0.50	100	1	20		

Analytical Batch 513225 Prep Batch 512740 Prep Method SW-846 3005 Dissolved		Client ID MW08-03 GCAL ID 21307300201 Sample Type SAMPLE Prep Date 07/30/2013 13:15 Analytical Date 08/06/2013 19:25 Matrix Water		1218697MS 1218750 MS 07/30/2013 13:15 08/06/2013 19:39 Water			1218697MSD 1218751 MSD 07/30/2013 13:15 08/06/2013 19:54 Water						
SW-846 6010C Dissolved				Units Result	mg/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	RPD Limit
7439-89-6	Iron	0.0	0.050	5.00	4.70	94	80 - 120	4.65	93	1	20		
7439-95-4	Magnesium	588	0.050	5.00	602	291*	80 - 120	595	136*	1	20		

Inorganics Quality Control Summary

Analytical Batch 513395 Prep Batch 513121 Prep Method SW-846 3005 Dissolved	Client ID MB513121 GCAL ID 1220731 Sample Type Method Blank Prep Date 08/08/2013 12:00 Analytical Date 08/08/2013 23:08 Matrix Water	LCS513121 1220732 LCS 08/08/2013 12:00 08/08/2013 23:16 Water				
SW-846 6010C Dissolved		Units mg/L Result RDL	Spike Added	Result	% R	Control Limits % R
7440-43-9	Cadmium	0.0013U	0.0013	0.50	0.54	107 80 - 120

Analytical Batch 513395 Prep Batch 513121 Prep Method SW-846 3005 Dissolved	Client ID MW08-01 GCAL ID 21307300202 Sample Type SAMPLE Prep Date 08/08/2013 12:00 Analytical Date 08/08/2013 23:22 Matrix Water	1218698MS 1221853 MS 08/08/2013 12:00 08/08/2013 23:36 Water	1218698MSD 1221854 MSD 08/08/2013 12:00 08/08/2013 23:50 Water							
SW-846 6010C Dissolved		Units mg/L Result RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	RPD Limit
7440-43-9	Cadmium	0.0	0.0013	0.50	0.48	96 80 - 120	0.53	107	10	20

General Chemistry Quality Control Summary

Analytical Batch 512765 Prep Batch N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB512765 1218957 Method Blank 07/30/2013 15:30 Water	LCS512765 1218958 LCS 07/30/2013 15:30 Water				
SM 2540 C - 1997		Units Result	mg/L RDL	Spike Added	Result	% R	Control Limits % R
WET-035	Total Dissolved Solids(TDS)	4.39U	4.39	1000	986	99	90 - 110

Analytical Batch 512765 Prep Batch N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MW08-02 21307300203 SAMPLE 07/30/2013 15:30 Water	1218699DUP 1218959 DUP 07/30/2013 15:30 Water			
SM 2540 C - 1997		Units Result	mg/L RDL	Result	RPD	RPD Limit
WET-035	Total Dissolved Solids(TDS)	3710	4.39	3740	1	5

Analytical Batch 513010 Prep Batch N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB513010 1220293 Method Blank 08/02/2013 16:59 Water	LCS513010 1220294 LCS 08/02/2013 16:59 Water				
SM 2540 C - 1997		Units Result	mg/L RDL	Spike Added	Result	% R	Control Limits % R
WET-035	Total Dissolved Solids(TDS)	4.39U	4.39	1000	1010	101	90 - 110

Analytical Batch 513010 Prep Batch N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	300405 DP 8 (127-129) 21308022803 SAMPLE 08/02/2013 16:59 Water	1220149DUP 1220295 DUP 08/02/2013 16:59 Water			
SM 2540 C - 1997		Units Result	mg/L RDL	Result	RPD	RPD Limit
WET-035	Total Dissolved Solids(TDS)	1360	4.39	1360	0	5

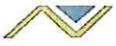
General Chemistry Quality Control Summary

Analytical Batch 513010 Prep Batch N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MRAA-01D 21308022402 SAMPLE 08/02/2013 16:59 Water	1220106DUP 1220296 DUP 08/02/2013 16:59 Water		
SM 2540 C - 1997		Units Result	mg/L RDL	Result	RPD
WET-035	Total Dissolved Solids(TDS)	13300	4.39	13600	2
					RPD Limit 5

General Chemistry Quality Control Summary

Analytical Batch 512735 Prep Batch N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB512735 1218727 Method Blank 07/30/2013 16:43 Water	LCSS512735 1218728 LCS 07/30/2013 16:28 Water				
EPA 300.0		Units Result	mg/L RDL	Spike Added	Result	% R	Control Limits % R
14797-55-8	Nitrate	0.020U	0.020	2.50	2.42	97	80 - 120

Analytical Batch 512735 Prep Batch N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	SWMU183-MW03 21307300205 SAMPLE 07/31/2013 08:42 Water	1218702MS 1218729 MS 07/31/2013 09:00 Water				1218702MSD 1218730 MSD 07/31/2013 09:17 Water				
EPA 300.0		Units Result	mg/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	RPD Limit
14797-55-8	Nitrate	24.2	0.400	50.0	74.1	100	75 - 125	74.3	100	0	25



NATIONVIEW / 4771 / 21307602 / 08/08/13

Page: 1 of 1

NV Project No: 10-0004

COC Number(1): 07292013-1

LIMS Number:

Chain of Custody and Analytical Request

Facility/Base ID: Holloman Air Force Base, New Mexico								Sample Analysis Requested ⁽⁵⁾										Quality Assurance Samples ⁽⁶⁾		
Project/Site Name: SD-08 Quarterly Groundwater Sampling (Q7)								Number of Containers	VOCs (S2,60B)	TAL Metals [Dissolved] (0010B/7470A)	Mercury [Total] (0010B/7470A)	TDS (SM19 2540C)	Nitrate (00090567)	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Code ID			
Client Name: USACE Omaha District																				
Collected by: Tony Lucero / Brian Parrish																				
Field Sample ID (30 Character Max)	ERPMS LOCID (15 Character Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hh:mm)	Sample Depth (beginning - ending)	SA Code (e)	Sample Number (n)	Sample Matrix (s)													
MW08-03	MW08-03	29-Jul-2013	0815		N	1	WG	7	☐	☐	☐	☐	☐	☐	☐	☐	☐	1		
MW08-01	MW08-01	29-Jul-2013	0910		N	1	WG	7	☐	☐	☐	☐	☐	☐	☐	☐	☐	2		
MW08-02	MW08-02	29-Jul-2013	1005		N	1	WG	7	☐	☐	☐	☐	☐	☐	☐	☐	☐	3		
MW08-07	MW08-07	29-Jul-2013	1100		N	1	WG	7	☐	☐	☐	☐	☐	☐	☐	☐	☐	4		
MWU183-MW03	SWMU183-MW03	29-Jul-2013	1145		N	1	WG	7	☐	☐	☐	☐	☐	☐	☐	☐	☐	5		
BLANK	Field QC	29-Jul-2013			TB		WQ	3	☐									6		
COMMENTS: Dissolved TAL Metals filtered in the field																				
Custody Transfers Prior to Receipt by Laboratory								Sample Delivery Details / Laboratory Receipt												
1. Prepared By (Signed) Date Time				Received by (Signed) Date Time				Delivered Directly to Lab:				Shipped No: 18E04								
1. <i>Tony Lucero</i> 07/29/2013 1200				1. <i>Brian Parrish</i> 07/29/2013 0915				Method of Shipment: Fed Ex				Airbill Number: 7963351497								
2. <i>FED EX 073013 0925</i>				3. <i>Tony Lucero</i> 07/29/2013 0915				Analytical Lab: GCAL				Delivery Location: Baton Rouge, LA								
3. <i>FED EX 073013 0925</i>				3. <i>Tony Lucero</i> 07/29/2013 0915				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, ER = 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, resampled 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 (dd/mm/yyyy) 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



SAMPLE RECEIVING CHECKLIST



SAMPLE DELIVERY GROUP 213073002		CHECKLIST	
Client 4771 - NationView LLC	Transport Method FEDEX	Were all samples received using proper thermal preservation?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Profile Number 204817	Received By Saucier, Charlotte	When used, were all custody seals intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Line Item(s) 3 - SD-08	Receive Date(s) 07/30/13	Were all samples received in proper containers?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
		Were all samples received using proper chemical preservation?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
		Was preservative added to any container at the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA
		Were all containers received in good condition?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
		Were all VOA vials received with no head space?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
		Do all sample labels match the Chain of Custody?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
		Did the Chain of Custody list the sampling technician?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
		Was the COC maintained i.e. all signatures, dates and time of receipt included?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
COOLERS		DISCREPANCIES	LABORATORY PRESERVATIONS
Airbill 7963 3535 1497	Temp(oC) 1.8 E24	None	None
NOTES			

ANALYTICAL RESULTS

PERFORMED BY

GULF COAST ANALYTICAL LABORATORIES, INC.

**7979 GSRI Avenue
Baton Rouge, LA 70820**

Report Date 08/13/2013

GCAL Report 213080115



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

Attn Jim Moore

Project Holloman AFB

CASE NARRATIVE

Client: NationView LLC **Report:** 213080115

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 SW-846 8260B analysis for analytical batch 513044, the LCS and/or LCSD recoveries are above the upper control limit for Bromochloromethane and 1,2-Dibromo-3-Chloropropane. These compounds were not detected in the associated samples.

METALS

In the SW-846 6010C analysis, samples 21308011501 (SD08-MW13) and 21308011502 (SD08-MW11) had to be diluted in order to bracket the concentration of target analytes within the linear dynamic range of the instrument.

In the SW-846 7470A analysis for prep batch 512927, 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, samples 21308011501 (SD08-MW13), 21308011502 (SD08-MW11) and 21308011504 (S10-MW02) 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

In the SM 2540 C analysis, sample 21308011501 (SD08-MW13) had to be diluted prior to filtration in order not to exceed the maximum residue allowed by the method.

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.


Karen Melrose

Authorized Signature

GCAL REPORT 213080115

THIS REPORT CONTAINS 32 PAGES.

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21308011501	SD08-MW13	Water	07/31/2013 08:25	08/01/2013 10:30
21308011502	SD08-MW11	Water	07/31/2013 09:40	08/01/2013 10:30
21308011503	SD08-MW10	Water	07/31/2013 10:30	08/01/2013 10:30
21308011504	S10-MW02	Water	07/31/2013 11:20	08/01/2013 10:30
21308011505	TRIP BLANK	Water	07/31/2013 00:00	08/01/2013 10:30

Summary of Compounds Detected

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21308011501	SD08-MW13	Water	07/31/2013 08:25	08/01/2013 10:30

SW-846 7470A

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.00011J	0.00020	0.000068	mg/L

SW-846 7470A Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000091J	0.00020	0.000068	mg/L

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-70-2	Calcium	604	4.00	1.00	mg/L
7440-50-8	Copper	0.096J	0.10	0.025	mg/L
7439-95-4	Magnesium	1800	1.00	0.25	mg/L
7440-09-7	Potassium	57.0	2.50	0.63	mg/L
7440-62-2	Vanadium	0.40	0.10	0.025	mg/L

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	Sodium	8230	25.0	6.25	mg/L

SM 2540 C - 1997

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	39800	100	43.9	mg/L

EPA 300.0

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	9.74J	25.0	1.00	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21308011502	SD08-MW11	Water	07/31/2013 09:40	08/01/2013 10:30

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.029J	0.10	0.025	mg/L
7440-70-2	Calcium	491	8.00	2.00	mg/L
7440-50-8	Copper	0.20	0.20	0.050	mg/L
7439-95-4	Magnesium	1000	2.00	0.50	mg/L
7439-96-5	Manganese	2.57	0.15	0.038	mg/L
7440-09-7	Potassium	23.9	5.00	1.25	mg/L
7440-62-2	Vanadium	0.58	0.20	0.050	mg/L

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	Sodium	5450	25.0	6.25	mg/L

SW-846 7470A

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000097J	0.00020	0.000068	mg/L

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
107-06-2	1,2-Dichloroethane	80.5	5.00	0.116	ug/L
78-87-5	1,2-Dichloropropane	5.37	5.00	0.150	ug/L
98-82-8	Isopropylbenzene (Cumene)	1.28J	5.00	0.130	ug/L

SM 2540 C - 1997

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	24000	100	43.9	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21308011503	SD08-MW10	Water	07/31/2013 10:30	08/01/2013 10:30

SW-846 7470A Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.00010J	0.00020	0.000068	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21308011503	SD08-MW10	Water	07/31/2013 10:30	08/01/2013 10:30

SW-846 7470A

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.00010J	0.00020	0.000068	mg/L

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	0.064J	0.20	0.050	mg/L
7440-38-2	Arsenic	0.043	0.020	0.0050	mg/L
7440-39-3	Barium	0.019	0.010	0.0025	mg/L
7440-70-2	Calcium	473	0.80	0.20	mg/L
7440-48-4	Cobalt	0.0051J	0.010	0.0025	mg/L
7440-50-8	Copper	0.016J	0.020	0.0050	mg/L
7439-89-6	Iron	0.54	0.20	0.050	mg/L
7439-95-4	Magnesium	261	0.20	0.050	mg/L
7439-96-5	Manganese	2.13	0.015	0.0038	mg/L
7440-09-7	Potassium	5.28	0.50	0.13	mg/L
7440-62-2	Vanadium	0.061	0.020	0.0050	mg/L

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	Sodium	296	1.00	0.25	mg/L

SM 2540 C - 1997

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	4210	10.0	4.39	mg/L

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
67-64-1	Acetone	1.43J	5.00	0.193	ug/L
71-43-2	Benzene	58.4	5.00	0.111	ug/L
100-41-4	Ethylbenzene	6.14	5.00	0.109	ug/L
98-82-8	Isopropylbenzene (Cumene)	4.58J	5.00	0.130	ug/L
103-65-1	n-Propylbenzene	7.79	5.00	0.727	ug/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21308011504	S10-MW02	Water	07/31/2013 11:20	08/01/2013 10:30

SW-846 7470A Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000096J	0.00020	0.000068	mg/L

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.0071J	0.020	0.0050	mg/L
7440-39-3	Barium	0.0082J	0.010	0.0025	mg/L
7440-70-2	Calcium	507	0.80	0.20	mg/L
7440-50-8	Copper	0.018J	0.020	0.0050	mg/L
7439-95-4	Magnesium	257	0.20	0.050	mg/L
7440-09-7	Potassium	14.1	0.50	0.13	mg/L
7440-62-2	Vanadium	0.10	0.020	0.0050	mg/L

SW-846 6010C Dissolved

CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	Sodium	102	1.00	0.25	mg/L

SW-846 7470A

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.00012J	0.00020	0.000068	mg/L

SM 2540 C - 1997

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	3760	10.0	4.39	mg/L

EPA 300.0

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	10.7	2.50	0.100	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21308011501	SD08-MW13	Water	07/31/2013 08:25	08/01/2013 10:30

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	08/03/2013 11:43	LBH	513044

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
21308011501	SD08-MW13	Water	07/31/2013 08:25	08/01/2013 10:30

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	08/03/2013 11:43	LBH	513044

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	55	ug/L	110	84 - 120
1868-53-7	Dibromofluoromethane	50	46.5	ug/L	93	87 - 116
2037-26-5	Toluene d8	50	51.7	ug/L	103	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	50	ug/L	100	76 - 127

SW-846 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
08/02/2013 13:00	512927	SW-846 7470A Dissolved	1	08/02/2013 16:47	CMB	513009

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000091J	0.00020	0.000068	mg/L

SW-846 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
08/02/2013 13:00	512927	SW-846 7470A	1	08/02/2013 16:48	CMB	513009

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.00011J	0.00020	0.000068	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21308011501	SD08-MW13	Water	07/31/2013 08:25	08/01/2013 10:30

SW-846 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
08/02/2013 10:15	512841	SW-846 3005 Dissolved	25	08/06/2013 14:28	BAM	513225

CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	Sodium	8230	25.0	6.25	mg/L

SW-846 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
08/02/2013 10:15	512841	SW-846 3005 Dissolved	5	08/06/2013 15:29	BAM	513225

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	0.25U	1.00	0.25	mg/L
7440-36-0	Antimony	0.075U	0.30	0.075	mg/L
7440-38-2	Arsenic	0.025U	0.10	0.025	mg/L
7440-39-3	Barium	0.013U	0.050	0.013	mg/L
7440-41-7	Beryllium	0.0050U	0.020	0.0050	mg/L
7440-43-9	Cadmium	0.0063U	0.025	0.0063	mg/L
7440-70-2	Calcium	604	4.00	1.00	mg/L
7440-47-3	Chromium	0.013U	0.050	0.013	mg/L
7440-48-4	Cobalt	0.013U	0.050	0.013	mg/L
7440-50-8	Copper	0.096J	0.10	0.025	mg/L
7439-89-6	Iron	0.25U	1.00	0.25	mg/L
7439-92-1	Lead	0.019U	0.075	0.019	mg/L
7439-95-4	Magnesium	1800	1.00	0.25	mg/L
7439-96-5	Manganese	0.019U	0.075	0.019	mg/L
7440-02-0	Nickel	0.050U	0.20	0.050	mg/L
7440-09-7	Potassium	57.0	2.50	0.63	mg/L
7782-49-2	Selenium	0.050U	0.20	0.050	mg/L
7440-22-4	Silver	0.013U	0.050	0.013	mg/L
7440-28-0	Thallium	0.025U	0.10	0.025	mg/L
7440-62-2	Vanadium	0.40	0.10	0.025	mg/L
7440-66-6	Zinc	0.025U	0.10	0.025	mg/L

SM 2540 C - 1997

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	08/02/2013 16:59	AEL	513010

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	39800	100	43.9	mg/L

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			50	08/01/2013 15:45	MCP	512897

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	9.74J	25.0	1.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21308011502	SD08-MW11	Water	07/31/2013 09:40	08/01/2013 10:30

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	08/03/2013 12:05	LBH	513044

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	80.5	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	5.37	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)	1.28J	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
21308011502	SD08-MW11	Water	07/31/2013 09:40	08/01/2013 10:30

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	08/03/2013 12:05	LBH	513044

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	55.4	ug/L	111	84 - 120
1868-53-7	Dibromofluoromethane	50	49.3	ug/L	99	87 - 116
2037-26-5	Toluene d8	50	50.8	ug/L	102	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	49.8	ug/L	100	76 - 127

SW-846 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
08/02/2013 13:00	512927	SW-846 7470A Dissolved	1	08/02/2013 16:50	CMB	513009

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000068U	0.00020	0.000068	mg/L

SW-846 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
08/02/2013 13:00	512927	SW-846 7470A	1	08/02/2013 16:52	CMB	513009

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000097J	0.00020	0.000068	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21308011502	SD08-MW11	Water	07/31/2013 09:40	08/01/2013 10:30

SW-846 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
08/02/2013 10:15	512841	SW-846 3005 Dissolved	10	08/06/2013 14:35	BAM	513225

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	0.029J	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	491	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	0.20	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	1000	2.00	0.50	mg/L
7439-96-5	Manganese	2.57	0.15	0.038	mg/L
7440-02-0	Nickel	0.10U	0.40	0.10	mg/L
7440-09-7	Potassium	23.9	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	0.58	0.20	0.050	mg/L
7440-66-6	Zinc	0.050U	0.20	0.050	mg/L

SW-846 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
08/02/2013 10:15	512841	SW-846 3005 Dissolved	25	08/06/2013 15:53	BAM	513225

CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	Sodium	5450	25.0	6.25	mg/L

SM 2540 C - 1997

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	08/07/2013 09:14	BNW	513246

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	24000	100	43.9	mg/L

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			50	08/01/2013 16:38	MCP	512897

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	1.00U	25.0	1.00	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21308011503	SD08-MW10	Water	07/31/2013 10:30	08/01/2013 10:30

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	08/03/2013 12:26	LBH	513044

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	1.43J	5.00	0.193	ug/L
71-43-2	Benzene	58.4	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	6.14	5.00	0.109	ug/L
87-68-3	Hexachlorobutadiene	0.265U	5.00	0.265	ug/L
98-82-8	Isopropylbenzene (Cumene)	4.58J	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
21308011503	SD08-MW10	Water	07/31/2013 10:30	08/01/2013 10:30

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	08/03/2013 12:26	LBH	513044

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	7.79	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	57.2	ug/L	114	84 - 120
1868-53-7	Dibromofluoromethane	50	48.7	ug/L	97	87 - 116
2037-26-5	Toluene d8	50	51.3	ug/L	103	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	51.5	ug/L	103	76 - 127

SW-846 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
08/02/2013 13:00	512927	SW-846 7470A Dissolved	1	08/02/2013 16:54	CMB	513009

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.00010J	0.00020	0.000068	mg/L

SW-846 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
08/02/2013 13:00	512927	SW-846 7470A	1	08/02/2013 16:55	CMB	513009

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.00010J	0.00020	0.000068	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21308011503	SD08-MW10	Water	07/31/2013 10:30	08/01/2013 10:30

SW-846 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
08/02/2013 10:15	512841	SW-846 3005 Dissolved	1	08/06/2013 22:15	BAM	513225

CAS#	Parameter	Result	RDL	MDL	Units
7429-90-5	Aluminum	0.064J	0.20	0.050	mg/L
7440-36-0	Antimony	0.015U	0.060	0.015	mg/L
7440-38-2	Arsenic	0.043	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	473	0.80	0.20	mg/L
7440-47-3	Chromium	0.0025U	0.010	0.0025	mg/L
7440-48-4	Cobalt	0.0051J	0.010	0.0025	mg/L
7440-50-8	Copper	0.016J	0.020	0.0050	mg/L
7439-89-6	Iron	0.54	0.20	0.050	mg/L
7439-92-1	Lead	0.0038U	0.015	0.0038	mg/L
7439-95-4	Magnesium	261	0.20	0.050	mg/L
7439-96-5	Manganese	2.13	0.015	0.0038	mg/L
7440-02-0	Nickel	0.010U	0.040	0.010	mg/L
7440-09-7	Potassium	5.28	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
7440-28-0	Thallium	0.0050U	0.020	0.0050	mg/L
7440-62-2	Vanadium	0.061	0.020	0.0050	mg/L
7440-66-6	Zinc	0.0050U	0.020	0.0050	mg/L

SW-846 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
08/02/2013 10:15	512841	SW-846 3005 Dissolved	1	08/07/2013 14:39	BAM	513292

CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	Sodium	296	1.00	0.25	mg/L

SM 2540 C - 1997

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	08/02/2013 16:59	AEL	513010

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	4210	10.0	4.39	mg/L

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	08/02/2013 09:11	MCP	512897

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	0.020U	0.500	0.020	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21308011504	S10-MW02	Water	07/31/2013 11:20	08/01/2013 10:30

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	08/03/2013 12:48	LBH	513044

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
21308011504	S10-MW02	Water	07/31/2013 11:20	08/01/2013 10:30

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	08/03/2013 12:48	LBH	513044

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	56.2	ug/L	112	84 - 120
1868-53-7	Dibromofluoromethane	50	47.3	ug/L	95	87 - 116
2037-26-5	Toluene d8	50	51.4	ug/L	103	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	51.5	ug/L	103	76 - 127

SW-846 7470A Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
08/02/2013 13:00	512927	SW-846 7470A Dissolved	1	08/02/2013 16:57	CMB	513009

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.000096J	0.00020	0.000068	mg/L

SW-846 7470A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
08/02/2013 13:00	512927	SW-846 7470A	1	08/02/2013 16:59	CMB	513009

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.00012J	0.00020	0.000068	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21308011504	S10-MW02	Water	07/31/2013 11:20	08/01/2013 10:30

SW-846 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
08/02/2013 10:15	512841	SW-846 3005 Dissolved	1	08/06/2013 22:30	BAM	513225

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	0.0071J	0.020	0.0050	mg/L
7440-39-3	Barium	0.0082J	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	507	0.80	0.20	mg/L
7440-47-3	Chromium	0.0025U	0.010	0.0025	mg/L
7440-48-4	Cobalt	0.0025U	0.010	0.0025	mg/L
7440-50-8	Copper	0.018J	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	257	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	14.1	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
7440-28-0	Thallium	0.0050U	0.020	0.0050	mg/L
7440-62-2	Vanadium	0.10	0.020	0.0050	mg/L
7440-66-6	Zinc	0.0050U	0.020	0.0050	mg/L

SW-846 6010C Dissolved

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
08/02/2013 10:15	512841	SW-846 3005 Dissolved	1	08/07/2013 14:53	BAM	513292

CAS#	Parameter	Result	RDL	MDL	Units
7440-23-5	Sodium	102	1.00	0.25	mg/L

SM 2540 C - 1997

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	08/02/2013 16:59	AEL	513010

CAS#	Parameter	Result	RDL	MDL	Units
WET-035	Total Dissolved Solids(TDS)	3760	10.0	4.39	mg/L

EPA 300.0

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			5	08/01/2013 17:12	MCP	512897

CAS#	Parameter	Result	RDL	MDL	Units
14797-55-8	Nitrate	10.7	2.50	0.100	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21308011505	TRIP BLANK	Water	07/31/2013 00:00	08/01/2013 10:30

SW-846 8260B Water

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	08/03/2013 13:10	LBH	513044

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
21308011505	TRIP BLANK	Water	07/31/2013 00:00	08/01/2013 10:30

SW-846 8260B Water

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	08/03/2013 13:10	LBH	513044

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	55.7	ug/L	111	84 - 120
1868-53-7	Dibromofluoromethane	50	47.8	ug/L	96	87 - 116
2037-26-5	Toluene d8	50	50.1	ug/L	100	86 - 112
17060-07-0	1,2-Dichloroethane-d4	50	51.8	ug/L	104	76 - 127

GC/MS Volatiles Quality Control Summary

Analytical Batch 513044 Prep Batch N/A		Client ID MB513044 GCAL ID 1220507 Sample Type Method Blank Analytical Date 08/03/2013 11:21 Matrix Water		LCS513044 1220508 LCS 08/03/2013 09:32 Water			LCS0513044 1220509 LCS05 08/03/2013 09:54 Water				
SW-846 8260B		Units Result	ug/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	RPD Limit
67-64-1	Acetone	0.193U	0.193	50.0	50.7	101	59 - 134	52.9	106	4	30
74-97-5	Bromochloromethane	0.127U	0.127	50.0	57.4	115*	78 - 112	57.6	115*	0	30
75-27-4	Bromodichloromethane	0.083U	0.083	50.0	55.4	111	78 - 116	55.6	111	0	30
75-25-2	Bromoform	0.215U	0.215	50.0	58.0	116	68 - 128	58.3	117	1	30
74-83-9	Bromomethane	0.427U	0.427	50.0	33.0	66	55 - 151	36.1	72	9	30
75-15-0	Carbon disulfide	0.190U	0.190	50.0	41.4	83	67 - 147	41.8	84	1	30
56-23-5	Carbon tetrachloride	0.248U	0.248	50.0	50.2	100	74 - 139	50.0	100	0	30
75-00-3	Chloroethane	0.235U	0.235	50.0	38.7	77	54 - 166	36.4	73	6	30
136777-61-2	m,p-Xylene	0.123U	0.123	100	104	104	83 - 121	104	104	0	30
67-66-3	Chloroform	0.155U	0.155	50.0	51.1	102	85 - 123	50.7	101	1	30
74-87-3	Chloromethane	0.144U	0.144	50.0	43.8	88	55 - 173	43.9	88	0	30
124-48-1	Dibromochloromethane	0.054U	0.054	50.0	57.3	115	74 - 116	57.7	115	1	30
74-95-3	Dibromomethane	0.211U	0.211	50.0	50.6	101	81 - 116	50.4	101	0	30
75-71-8	Dichlorodifluoromethane	0.145U	0.145	50.0	32.0	64	34 - 158	32.6	65	2	30
75-34-3	1,1-Dichloroethane	0.171U	0.171	50.0	50.0	100	82 - 127	50.4	101	1	30
107-06-2	1,2-Dichloroethane	0.116U	0.116	50.0	53.7	107	76 - 122	53.9	108	0	30
156-59-2	cis-1,2-Dichloroethene	0.103U	0.103	50.0	51.2	102	81 - 114	51.5	103	1	30
156-60-5	trans-1,2-Dichloroethene	0.077U	0.077	50.0	50.3	101	82 - 126	50.4	101	0	30
75-09-2	Methylene chloride	0.149U	0.149	50.0	49.9	100	69 - 125	50.3	101	1	30
78-87-5	1,2-Dichloropropane	0.150U	0.150	50.0	54.8	110	81 - 120	54.5	109	1	30
10061-01-5	cis-1,3-Dichloropropene	0.124U	0.124	50.0	54.7	109	83 - 119	53.8	108	2	30
10061-02-6	trans-1,3-Dichloropropene	0.128U	0.128	50.0	56.1	112	87 - 123	58.1	116	4	30
100-41-4	Ethylbenzene	0.109U	0.109	50.0	51.7	103	87 - 118	50.9	102	2	30
591-78-6	2-Hexanone	0.122U	0.122	50.0	55.6	111	58 - 125	57.0	114	2	30
98-82-8	Isopropylbenzene (Cumene)	0.130U	0.130	50.0	54.5	109	87 - 131	52.3	105	4	30
78-93-3	2-Butanone	0.142U	0.142	50.0	56.6	113	61 - 127	57.8	116	2	30
74-88-4	Methyl iodide	0.084U	0.084	50.0	46.1	92	72 - 125	45.8	92	1	30
108-10-1	4-Methyl-2-pentanone	0.120U	0.120	50.0	56.0	112	62 - 125	57.8	116	3	30
103-65-1	n-Propylbenzene	0.727U	0.727	50.0	48.8	98	86 - 125	47.3	95	3	30
100-42-5	Styrene	0.089U	0.089	50.0	52.5	105	78 - 118	52.4	105	0	30
127-18-4	Tetrachloroethane	0.193U	0.193	50.0	58.0	116	80 - 131	58.5	117	1	30
630-20-6	1,1,1,2-Tetrachloroethane	0.120U	0.120	50.0	57.0	114	81 - 119	55.6	111	2	30
79-34-5	1,1,2,2-Tetrachloroethane	0.109U	0.109	50.0	50.5	101	71 - 120	49.4	99	2	30

GC/MS Volatiles Quality Control Summary

Analytical Batch 513044 Prep Batch N/A		Client ID GCAL ID 1220507 Sample Type Method Blank Analytical Date 08/03/2013 11:21 Matrix Water		LCS513044 1220508 LCS 08/03/2013 09:32 Water			LCSD513044 1220509 LCSD 08/03/2013 09:54 Water				
SW-846 8260B		Units Result	ug/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	RPD Limit
120-82-1	1,2,4-Trichlorobenzene	0.105U	0.105	50.0	59.0	118	68 - 123	57.4	115	3	30
71-55-6	1,1,1-Trichloroethane	0.123U	0.123	50.0	53.0	106	79 - 133	52.5	105	1	30
79-00-5	1,1,2-Trichloroethane	0.159U	0.159	50.0	54.2	108	80 - 114	53.7	107	1	30
75-69-4	Trichlorofluoromethane	0.157U	0.157	50.0	43.3	87	66 - 156	42.8	86	1	30
96-18-4	1,2,3-Trichloropropane	0.065U	0.065	50.0	54.0	108	77 - 115	50.4	101	7	30
95-63-6	1,2,4-Trimethylbenzene	0.084U	0.084	50.0	52.1	104	82 - 120	50.8	102	3	30
108-67-8	1,3,5-Trimethylbenzene	0.066U	0.066	50.0	49.1	98	83 - 123	46.8	94	5	30
75-01-4	Vinyl chloride	0.127U	0.127	50.0	40.9	82	57 - 153	42.2	84	3	30
95-47-6	o-Xylene	0.055U	0.055	50.0	53.2	106	83 - 121	53.1	106	0	30
96-12-8	1,2-Dibromo-3-chloropropane	0.194U	0.194	50.0	61.0	122*	61 - 118	61.4	123*	1	30
106-93-4	1,2-Dibromoethane	0.102U	0.102	50.0	55.1	110	80 - 115	55.1	110	0	30
1634-04-4	tert-Butyl methyl ether (MTBE)	0.078U	0.078	50.0	50.9	102	75 - 116	50.8	102	0	30
540-59-0	1,2-Dichloroethene(Total)	0.180U	0.180	100	102	102	74 - 128	102	102	0	30
99-87-6	4-Isopropyltoluene	0.070U	0.070	50.0	51.1	102	83 - 125	49.0	98	4	30
1330-20-7	Xylene (total)	0.179U	0.179	150	157	105	74 - 127	157	105	0	30
110-57-6	trans-1,4-Dichloro-2-butene	0.264U	0.264	50.0	55.5	111	51 - 137	57.1	114	3	30
594-20-7	2,2-Dichloropropane	0.170U	0.170	50.0	53.0	106	77 - 138	53.1	106	0	30
76-13-1	Trichlorotrifluoroethane	0.158U	0.158	50.0	47.1	94	74 - 139	46.4	93	1	30
563-58-6	1,1-Dichloropropene	0.052U	0.052	50.0	51.2	102	87 - 127	50.5	101	1	30
142-28-9	1,3-Dichloropropane	0.059U	0.059	50.0	52.6	105	81 - 113	51.9	104	1	30
108-86-1	Bromobenzene	0.145U	0.145	50.0	49.0	98	83 - 115	48.3	97	1	30
95-49-8	2-Chlorotoluene	0.080U	0.080	50.0	49.1	98	81 - 121	46.9	94	5	30
106-43-4	4-Chlorotoluene	0.124U	0.124	50.0	52.3	105	84 - 120	51.0	102	3	30
98-06-6	tert-Butylbenzene	0.087U	0.087	50.0	52.4	105	83 - 126	49.2	98	6	30
135-98-8	sec-Butylbenzene	0.107U	0.107	50.0	52.3	105	86 - 127	49.4	99	6	30
541-73-1	1,3-Dichlorobenzene	0.138U	0.138	50.0	52.7	105	86 - 115	50.6	101	4	30
106-46-7	1,4-Dichlorobenzene	0.083U	0.083	50.0	49.1	98	87 - 113	48.8	98	1	30
104-51-8	n-Butylbenzene	0.123U	0.123	50.0	50.2	100	84 - 124	49.1	98	2	30
95-50-1	1,2-Dichlorobenzene	0.135U	0.135	50.0	51.8	104	85 - 115	51.9	104	0	30
87-68-3	Hexachlorobutadiene	0.265U	0.265	50.0	61.1	122	71 - 133	59.5	119	3	30
91-20-3	Naphthalene	0.176U	0.176	50.0	57.5	115	59 - 125	57.5	115	0	35
75-35-4	1,1-Dichloroethene	0.208U	0.208	50.0	45.2	90	75 - 133	45.4	91	0	20
71-43-2	Benzene	0.111U	0.111	50.0	51.1	102	83 - 124	50.2	100	2	20

GC/MS Volatiles Quality Control Summary

Analytical Batch 513044 Prep Batch N/A		Client ID MB513044 GCAL ID 1220507 Sample Type Method Blank Analytical Date 08/03/2013 11:21 Matrix Water		LCS513044 1220508 LCS 08/03/2013 09:32 Water			LCSD513044 1220509 LCSD 08/03/2013 09:54 Water				
SW-846 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	54.0	108	85 - 124	54.9	110	2	20
108-88-3	Toluene	0.122U	0.122	50.0	51.2	102	86 - 116	52.0	104	2	20
108-90-7	Chlorobenzene	0.083U	0.083	50.0	52.0	104	87 - 115	51.2	102	2	20
Surrogate											
460-00-4	4-Bromofluorobenzene	57	114	50	56.1	112	84 - 120	57.5	115		
1868-53-7	Dibromofluoromethane	46.8	94	50	45.3	91	87 - 116	46.9	94		
2037-26-5	Toluene d8	51.8	104	50	49.8	100	86 - 112	50.2	100		
17060-07-0	1,2-Dichloroethane-d4	49.9	100	50	49.4	99	76 - 127	50.6	101		

Inorganics Quality Control Summary

Analytical Batch 513009 Prep Batch 512927 Prep Method SW-846 7470A		Client ID GCAL ID 1219775 Sample Type Method Blank Prep Date 08/02/2013 13:00 Analytical Date 08/02/2013 16:31 Matrix Water		LCS512927 1219776 LCS 08/02/2013 13:00 08/02/2013 16:33 Water			
SW-846 7470A		Units	mg/L	Spike	Result	Control	
		Result	RDL	Added	% R	Limits % R	
7439-97-6	Mercury	0.000078J	0.000068	0.0050	0.0049	98	88 - 111

Analytical Batch 513009 Prep Batch 512927 Prep Method SW-846 7470A		Client ID GCAL ID 21307304801 Sample Type SAMPLE Prep Date 08/02/2013 13:00 Analytical Date 08/02/2013 16:35 Matrix Solid		CARBON FILTERS AB AND C 1219056MS 1219777 MS 08/02/2013 13:00 08/02/2013 16:37 Solid			1219056MSD 1220383 MSD 08/02/2013 13:00 08/02/2013 17:01 Solid				
SW-846 7470A		Units	mg/L	Spike	Result	% R	Control	Result	% R	RPD	RPD
		Result	RDL	Added	% R	Limits % R	% R	RPD	Limit		
7439-97-6	Mercury	0.00010	0.000068	0.0050	0.0030	59*	80 - 120	0.0030	59*	0	20

Inorganics Quality Control Summary

Analytical Batch 513144 Prep Batch 512841 Prep Method SW-846 3005 Dissolved		Client ID MB512841 GCAL ID 1219379 Sample Type Method Blank Prep Date 08/02/2013 10:15 Analytical Date 08/05/2013 21:20 Matrix Water		LCS512841 1219380 LCS 08/02/2013 10:15 08/05/2013 21:27 Water			
SW-846 6010C Dissolved		Units Result	mg/L RDL	Spike Added	Result	% R	Control Limits % R
7429-90-5	Aluminum	0.050U	0.050	5.00	4.85	97	80 - 120
7440-36-0	Antimony	0.015U	0.015	0.50	0.48	96	80 - 120
7440-38-2	Arsenic	0.0050U	0.0050	0.50	0.49	98	80 - 120
7440-39-3	Barium	0.0025U	0.0025	0.50	0.47	93	80 - 120
7440-41-7	Beryllium	0.0010U	0.0010	0.50	0.47	94	80 - 120
7440-43-9	Cadmium	0.0013U	0.0013	0.50	0.48	95	80 - 120
7440-70-2	Calcium	0.20U	0.20	5.00	4.94	99	80 - 120
7440-47-3	Chromium	0.0025U	0.0025	0.50	0.46	93	80 - 120
7440-48-4	Cobalt	0.0025U	0.0025	0.50	0.47	95	80 - 120
7440-50-8	Copper	0.0050U	0.0050	0.50	0.46	92	80 - 120
7439-89-6	Iron	0.050U	0.050	5.00	4.84	97	80 - 120
7439-92-1	Lead	0.0038U	0.0038	0.50	0.47	94	80 - 120
7439-95-4	Magnesium	0.050U	0.050	5.00	4.88	98	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	0.48	96	80 - 120
7440-09-7	Potassium	0.13U	0.13	10.0	10.9	109	80 - 120
7782-49-2	Selenium	0.010U	0.010	0.50	0.49	98	80 - 120
7440-22-4	Silver	0.0025U	0.0025	0.50	0.46	93	80 - 120
7440-23-5	Sodium	0.25U	0.25	20.0	19.2	96	80 - 120
7440-28-0	Thallium	0.0050U	0.0050	0.50	0.48	96	80 - 120
7440-82-2	Vanadium	0.0050U	0.0050	0.50	0.46	91	80 - 120
7440-66-6	Zinc	0.0050U	0.0050	0.50	0.48	95	80 - 120

General Chemistry Quality Control Summary

Analytical Batch 513010 Prep Batch N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB513010 1220293 Method Blank 08/02/2013 16:59 Water	LCS513010 1220294 LCS 08/02/2013 16:59 Water				
SM 2540 C - 1997		Units Result	mg/L RDL	Spike Added	Result	% R	Control Limits % R
WET-035	Total Dissolved Solids(TDS)	4.39U	4.39	1000	1010	101	90 - 110

Analytical Batch 513010 Prep Batch N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	300405 DP 8 (127-129) 21308022803 SAMPLE 08/02/2013 16:59 Water	1220149DUP 1220295 DUP 08/02/2013 16:59 Water			
SM 2540 C - 1997		Units Result	mg/L RDL	Result	RPD	RPD Limit
WET-035	Total Dissolved Solids(TDS)	1360	4.39	1360	0	5

Analytical Batch 513010 Prep Batch N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MRAA-01D 21308022402 SAMPLE 08/02/2013 16:59 Water	1220106DUP 1220296 DUP 08/02/2013 16:59 Water			
SM 2540 C - 1997		Units Result	mg/L RDL	Result	RPD	RPD Limit
WET-035	Total Dissolved Solids(TDS)	13300	4.39	13600	2	5

Analytical Batch 513246 Prep Batch N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	MB513246 1221298 Method Blank 08/07/2013 09:14 Water	LCS513246 1221299 LCS 08/07/2013 09:14 Water				
SM 2540 C - 1997		Units Result	mg/L RDL	Spike Added	Result	% R	Control Limits % R
WET-035	Total Dissolved Solids(TDS)	4.39U	4.39	1000	998	100	90 - 110

General Chemistry Quality Control Summary

Analytical Batch 513246 Prep Batch N/A	Client ID GCAL ID Sample Type Analytical Date Matrix	UNOX Effluent 21308051905 SAMPLE 08/07/2013 09:14 Water	1220743DUP 1221300 DUP 08/07/2013 09:14 Water			
SM 2540 C - 1997		Units Result	mg/L RDL	Result	RPD	RPD Limit
WET-035	Total Dissolved Solids(TDS)	1840	4.39	1840	0	5

General Chemistry Quality Control Summary

Analytical Batch 512897 Prep Batch N/A		Client ID SD08-MW13 GCAL ID 21308011501 Sample Type SAMPLE Analytical Date 08/01/2013 15:45 Matrix Water			1219567MS 1219625 MS 08/01/2013 16:03 Water			1219567MSD 1219626 MSD 08/01/2013 16:20 Water			
EPA 300.0		Units	mg/L	Spike	Result	% R	Control	Result	% R	RPD	RPD
		Result	RDL	Added			Limits % R				Limit
14797-55-8	Nitrate	9.74	1.00	125	126	93	75 - 125	127	94	1	25



NATIONVIEW

4771 | 213080115 | 08/12/13

Page: 1 of 1

NV Project No: 10-0004

COC Number(1): 07312013-1

LIMS Number:

Chain of Custody and Analytical Request

Facility/Base ID: Holloman Air Force Base, New Mexico								Sample Analysis Requested ⁽⁵⁾						Quality Assurance Samples ⁽⁶⁾			
Project/Site Name: SD-08 Quarterly Groundwater Sampling (Q7)								Number of containers	VOCs (8260B)	TAL Metals [Dissolved] (6010B/7470A)	Mercury [Total] (6010B/7470A)	TDS (SM19 2540C)	Nitrate (3009056)	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
Client Name: USACE Omaha District																	
Collected by: Tony Lucero / Brian Parrish																	
Field Sample ID (30 Character Max)	ERFMS LOCID (15 Character Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hh:mm)	Sample Depth (beginning - ending)	SA Code ⁽²⁾	Sample Number ⁽³⁾	Sample Matrix ⁽⁴⁾										
SD08-MW13	SD08-MW13	31072013	0825		N	1	WG	7	in	in	in	in	in				
SD08-MW11	SD08-MW11	31072013	0940		N	1	WG	7	in	in	in	in	in				
SD08-MW10	SD08-MW10	31072013	1030		N	1	WG	7	in	in	in	in	in				
S10-MW02	S10-MW02	31072013	1120		N	1	WG	7	in	in	in	in	in				
TRIP BLANK	Field QC	31072013			TB		WQ	1	in						HA3151020		
COMMENTS: Dissolved TAL Metals filtered in the field																	
Custody Transfers Prior to Receipt by Laboratory								Sample Delivery Details / Laboratory Receipt									
Requested by (signed) Date Time				Received by (signed) Date Time				Delivered Directly to Lab:			Shipped No: 44 E24						
1. <i>[Signature]</i> 07/31/2013 1200				1. <i>[Signature]</i> 08/01/13 1030				Method of Shipment: FedEx			Airbill Number: 796366530451						
2. <i>[Signature]</i>				2. <i>[Signature]</i>				Analytical Lab: GCAL			Delivery Location: Baton Rouge, LA						
3. <i>[Signature]</i>				3. <i>[Signature]</i>				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, SD = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aquifer 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

1-2025



SAMPLE RECEIVING CHECKLIST



SAMPLE DELIVERY GROUP 213080115		CHECKLIST	YES	NO	NA
Client 4771 - NationView LLC	Transport Method FEDEX	Were all samples received using proper thermal preservation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Profile Number 204817	Received By Law, Brittany P.	When used, were all custody seals intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Line Item(s) 3 - SD-08	Receive Date(s) 08/01/13	Were all samples received in proper containers?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Were all samples received using proper chemical preservation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Was preservative added to any container at the lab?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		Were all containers received in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Were all VOA vials received with no head space?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Do all sample labels match the Chain of Custody?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Did the Chain of Custody list the sampling technician?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Was the COC maintained i.e. all signatures, dates and time of receipt included?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

COOLERS		DISCREPANCIES	LABORATORY PRESERVATIONS
Airbill 7963 6053 0451	Temp(°C) 4.4 (E24)	None	None

NOTES



NATIONAL VIEW / 4771 / 213072319 / 8/1/13

Page: 1 of 1

NV Project No: 10-0004

COC Number(1): 07222013-1

LIMS Number:

Chain of Custody and Analytical Request

Facility/Base I.D.:								Sample Analysis Requested ⁽⁵⁾					Quality Assurance Samples ⁽⁶⁾				
Project/Site Name:								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	
Client Name:																	
Collected by:																	
Field Sample ID (30 Characters Max)	ERPMS LOCID (15 Characters Max)	Date Collected (dd-mm-YYYY)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code ⁽³⁾	Sample Number ⁽⁴⁾	Sample Matrix ⁽⁴⁾										
SD08-MW12	S10-MW06*	22-07-2013	900	-	N		WG	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			per Brian Parrish 7/25 (SH)	1	
SD08-MW12-A	S10-MW06-A*	22-07-2013	900	-	FD		WG	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			per Brian Parrish 7/25 (SH)	2	
SD08-MW12		22-07-2013	1020	-	N		WG	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				3	
MW-08-06		22-07-2013	1100		N		WG	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				4	
MW-08-06-MS		22-07-2013	1100		MS		WG	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			removed per client (SH) 7/24	5	
MW-08-06-MSD		22-07-2013	1100		MSD		WG	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			removed per client (SH) 7/24	6	
Trip Blank								X*								HA3151020	7

COMMENTS: Dissolved TAL Metals filtered in the field

* added per client (SH) 7/23
email confirmation

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. Brian Parrish	07/22/13	12:35	1. Fed Ex	7/22/13	
2. Fed Ex	7/23/13	10:30	2. Brian Parrish	7/23/13	10:30
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab:	Shipped No.:	S.4 F.22
Method of Shipment: Fed Ex	Airbill Number:	796283983410
Analytical Lab: GCAL	Delivery Location:	Baton Rouge, LA
Lab Recipient:	Delivery Date/Time:	

- Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
- 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)
- 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.)
- 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
- Sample Analysis Requested: Analytical method requested and number of containers provided for each.
- 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



SAMPLE RECEIVING CHECKLIST



SAMPLE DELIVERY GROUP 213072319		CHECKLIST	
Client 4771 - NationView LLC	Transport Method FEDEX	Were all samples received using proper thermal preservation?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Profile Number 204817	Received By Saucier, Charlotte	When used, were all custody seals intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Line Item(s) 3 - SD-08	Receive Date(s) 07/23/13	Were all samples received in proper containers?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
		Were all samples received using proper chemical preservation?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
		Was preservative added to any container at the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA
		Were all containers received in good condition?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
		Were all VOA vials received with no head space?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
		Do all sample labels match the Chain of Custody?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
		Did the Chain of Custody list the sampling technician?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
		Was the COC maintained i.e. all signatures, dates and time of receipt included?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA

COOLERS		DISCREPANCIES	LABORATORY PRESERVATIONS
Airbill 796283983410	Temp(°C) 5.4 (E22)	None	None

NOTES	
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SAMPLE RECEIVING CHECKLIST



SAMPLE DELIVERY GROUP 213072407		CHECKLIST	
Client 4771 - NationView LLC	Transport Method FEDEX	Were all samples received using proper thermal preservation?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Profile Number 204817	Received By Saucier, Charlotte	When used, were all custody seals intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Line Item(s) 3 - SD-08	Receive Date(s) 07/24/13	Were all samples received in proper containers?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
		Were all samples received using proper chemical preservation?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
		Was preservative added to any container at the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA
		Were all containers received in good condition?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
		Were all VOA vials received with no head space?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
		Do all sample labels match the Chain of Custody?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA
		Did the Chain of Custody list the sampling technician?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
		Was the COC maintained i.e. all signatures, dates and time of receipt included?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA

COOLERS		DISCREPANCIES	LABORATORY PRESERVATIONS
Airbill 7982 9401 7033	Temp(oC) 3.4 (E24)	21307240706 - TRIP BLANK - Sample Discrepancy	None

NOTES	TRIP BLANK ANALYSIS NOT MARKED ON COC
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APPENDIX E

Data Validation Reports

Data Validation Report

This report contains the results of the review and validation of the specified data package performed by Marcia Olive, Bhat Environmental Associates, Denver, Colorado.

Introduction

This data validation report covers samples taken from Holloman Air Force Base, New Mexico, on July 22-31, 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	213073002	7/29/13	VOCs (SW8260B), Nitrate (EPA 300), Dissolved TALL Metals (SW610B), Total Mercury (SW7470A), TDS (SW2540C)
MW-08-02		213073002	7/29/13	
MW-08-03		213072407	7/23/13	
MW-08-04		213072319	7/22/13	
MW-08-05		213073002	7/29/13	
MW-08-06		213072407	7/23/13	
MW-08-07		213073002	7/29/13	
MW-08-08		213072407	7/23/13	
SWMU183-MW03		213073002	7/29/13	
S10-MW01		213072407	7/23/13	
S10-MW01-A		213080115	7/31/13	
S10-MW02		213072319	7/22/13	
S10-MW06		213080115	7/31/13	
S10-MW06-A		213072319	7/22/13	
SD08-MW10		213080115	7/31/13	
SD08-MW11		213072319	7/22/13	
SD08-MW12	213080115	7/31/13		
SD08-MW13				

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.

Blanks

The trip blank associated with samples S10-MW06, S10-MW06-A, SD08-MW12 and MW-08-06 reported a low level detection of acetone. This compound was not detected in the above mentioned samples and required no qualification.

The method blanks, associated with lab packages 213072407 and 213073002, yielded low level detections of calcium and zinc. When a positive result was reported it was well above 5x the blank concentration and required no qualification.

The method blank, associated with samples in package 213080115, yielded a low level detection of mercury. When detected in the sample the concentrations were less than 5x the blank concentration and qualified estimated, "J".

Blank spike sample (laboratory control sample-LCS)/surrogate

The LCS and/or LCS duplicate recoveries for 2-hexanone, 4-methyl-2-pentanone and styrene (lab package 213072407) were above QC limits. These compounds were not detected in any associated sample and required no qualification. The LCS and/or relative percent difference (RPD) for bromomethane and methyl iodide were outside QC limits (lab package 213073002). These samples were qualified estimated non-detected, "UJ" in the associated samples. Finally, the LCS/LCSD recoveries of bromochloromethane and 1,2-dibromo-3-chloropropane (lab package 213080115) were slightly 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 213072407, the MS/MSD recoveries for mercury, calcium, magnesium and sodium were outside control limits. Control limits were not applicable for all compounds since the target analyte concentration exceeded the spiked concentration by a factor of four or more. The lab package 213072319 yielded MS and/or MSD recoveries for 2-hexanone, 1,2-dibromo-3-chloropropane, 4-methyl-2-pentanone, n-butylbenzene, n-propylbenzene, sec-butylbenzene, calcium, sodium and magnesium outside QC 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. Lab package 213073002 yielded the MS/MSD recovery and/or RPD for mercury, sodium, potassium, calcium and magnesium 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. The MS/MSD recoveries of mercury, in lab package 213080115, were outside QC limits. Precision and accuracy were cross reference with the LCS recoveries; which were within control limits. Therefore, no compound warranted qualification based on matrix spike discrepancies.

Project specific quality assurance/quality control

The relative percent difference (RPD) between sample S10-MW01 and its field duplicate was outside control limits for 1,2-dichloropropane and trichloroethene. 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.

Summary of Qualified Data

Sample ID	Parameter	Qualifier*/Reason
S10-MW01	1,2-Dichloropropane	0.269 J
	Trichloroethene	0.443 J
S10-MW01-A	1,2-Dichloropropane	0.456 J
	Trichloroethene	2.38 J
MW08-03	Bromomethane	0.427 UJ
	Methyl iodide	0.084 UJ
MW08-01	Bromomethane	0.427 UJ
	Methyl iodide	0.084 UJ
MW08-02	Bromomethane	0.427 UJ
	Methyl iodide	0.084 UJ
MW08-07	Bromomethane	0.427 UJ
	Methyl iodide	0.084 UJ
SWMU185-MW03	Bromomethane	0.427 UJ
	Methyl iodide	0.084 UJ
SD08-MW13	Mercury (dissolved)	0.000091 J
	Mercury (total)	0.0001 J
SD08-MW11	Mercury (dissolved)	0.000097 J
	Mercury (total)	0.00010 J
SD08-MW10	Mercury (dissolved)	0.000096 J
	Mercury (total)	0.00012 J
S10-MW02	Mercury (dissolved)	0.000096 J
	Mercury (total)	0.00012 J

*validities in µg/L/metals in mg/l

APPENDIX F

Daily Quality Control Reports

Project Number/Name: 10-0004 GW Monitoring and Sampling at Multiple Sites

DQCR No.: 000

Date: 7/22/2013 Time On-Site: 6:30 AM Time Off-Site: 16:30 PM

Site Name: SD-08 Weather: Clear Temperature: 65 – 90

Contractor Personnel On-Site: NV; Brian Parrish

Visitors On-Site: None

Summary of Work Performed: Gathered supplies and materials after attending safety meeting. Made copy of maps and field forms. Sampled SD08-MW13 from 0830-0910 with duplicate. Sampled SD08-MW12 from 0910-1030. Sampled MW-08-06 from 1030-1115 with MS and MSD. Packed and shipped from 1115 until 1430. Performed daily paperwork from 1430 until 1630.

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 Turbidimeter

Calibration(s) Performed: YSI-PH, Conductivity, ORP; Turbidimeter-1, 10, 100 NTU

Equipment Problem(s)/Remedies: None

Samples Collected* Listed above

Sample Collection Method(s): GeoPump, ¼ inch Polyethylene tubing

Quality Control: Duplicate Samples, MS, MSD

Proposed Schedule for Tomorrow: Continue sampling SD-08 monitoring wells.

Additional Remarks:

Signature:

John Hymer Job Title: Site Manager

*Indicates sample media: groundwater, surface water, soil or sediment; sample type: composite, grab, split, duplicate, rinsate, and sample I.D. numbers

Project Number/Name: 10-0004 GW Monitoring and Sampling at Multiple SitesDQCR No.: 000Date: 7/23/2013 Time On-Site: 7:30 AM Time Off-Site: 16:30 PMSite Name: SD-08 Weather: Partly Cloudy Temperature: 65 – 97Contractor Personnel On-Site: NV; Brian ParrishVisitors On-Site: None

Summary of Work Performed: 0730 to 0800; gathered supplies and materials and mobilized to MW-08-04. 0800-0845 sampled MW08-04. 0845-0945 sampled MW-08-08. 0945-1040 sampled MW-08-05. 1040-1145 sampled S10-MW01 (included duplicate). 1145-1430 returned to Building 1266 for packing/shipping. 1430-1630 inventory sampling supplies and conduct daily recordkeeping.

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 TurbidimeterCalibration(s) Performed: YSI-PH, Conductivity, ORP; Tubidimeter- 1, 10, 100 NTUEquipment Problem(s)/Remedies: NoneSamples Collected* Listed aboveSample Collection Method(s): GeoPump, ¼ Polyethylene TubingQuality Control: Duplicate Samples, MS, MSDProposed Schedule for Tomorrow: Continue sampling SD-08 monitoring wells.

Additional Remarks:

Signature:**John Hymer Job Title: Site Manager**

*Indicates sample media: groundwater, surface water, soil or sediment; sample type: composite, grab, split, duplicate, rinsate, and sample I.D. numbers

Project Number/Name: 10-0004 GW Monitoring and Sampling at Multiple Sites

DQCR No.: 000

Date: 7/24/2013 Time On-Site: 7:30 AM Time Off-Site: 16:30 PM

Site Name: SD-08 Weather: Clear/Sunny Temperature: 72 – 95

Contractor Personnel On-Site: NV; Brian Parrish

Visitors On-Site: None

Summary of Work Performed: 0730 to 0800: gathered supplies and materials and attended safety meeting. 0800-0910 sampled S10-MW-06. 0900-1000 sampled SD08 MW-11. 1000-1100 sampled SD08 MW10. 1100-1130 sampled S10-MW02. 1130-1430 returned to Building 1266 for packing/shipping. 1430-1630 conduct daily recordkeeping.

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 Turbidimeter

Calibration(s) Performed: YSI- PH, Conductivity, ORP; Turbidimeter- 1,10,100 NTU

Equipment Problem(s)/Remedies: None

Samples Collected* Listed above

Sample Collection Method(s): GeoPump, ¼ inch Polyethelene Tubing

Quality Control: Duplicate Samples, MS, MSD

Proposed Schedule for Tomorrow: Continue sampling SD-08 monitoring wells.

Additional Remarks:

Signature:

John Hymer Job Title: Site Manager

*Indicates sample media: groundwater, surface water, soil or sediment; sample type: composite, grab, split, duplicate, rinsate, and sample I.D. numbers

Project Number/Name: 10-0004 GW Monitoring and Sampling at Multiple Sites

DQCR No.: 000

Date: 7/25/2013 Time On-Site: 6:30 AM Time Off-Site: 10:30 PM

Site Name: SD-08 Weather: Rain Temperature: 61 – 80

Contractor Personnel On-Site: NV; Brian Parrish

Visitors On-Site: None

Summary of Work Performed: Repacked coolers because FedEx did not pick up yesterday's shipment. Generated COCs for shipping.

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 Turbidimeter

Calibration(s) Performed: YSI- PH, Conductivity, ORP; Turbidimeter- 1,10,100 NTU

Equipment Problem(s)/Remedies: None

Samples Collected* Listed above

Sample Collection Method(s): GeoPump, ¼ inch Polyethylene Tubing

Quality Control: Duplicate Samples, MS, MSD

Proposed Schedule for Tomorrow: Continue sampling SD-08 monitoring wells.

Additional Remarks:

Signature:

John Hymer Job Title: Site Manager

*Indicates sample media: groundwater, surface water, soil or sediment; sample type: composite, grab, split, duplicate, rinsate, and sample I.D. numbers

Project Number/Name: 10-0004 GW Monitoring and Sampling at Multiple Sites

DQCR No.: 000

Date: 7/29/2013 Time On-Site: 6:30 AM Time Off-Site: 16:30 PM

Site Name: SD-08 Weather: Clear/Sunny Temperature: 65 – 97

Contractor Personnel On-Site: NV; Brian Parrish

Visitors On-Site: None

Summary of Work Performed: 0630-0730 Safety meeting, gathered supplies/materials, and mobilized to MW-08-03. 0730-0830 sampled MW-08-03. 0830-0930 sampled MW-08-01. 0935-1030 sampled MW-08-02. 1030-1130 sampled MW-08-07. 1130-1215 sampled SWMU/83-MW03. 1215-1245 Returned to Building 1266. 1245-1400 packed and shipped samples. Fueled and cleaned vehicle and restocked supplies and materials. 1400-1630 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 Turbidimeter

Calibration(s) Performed: YSI- PH, Conductivity, ORP; Tubidimeter- 1, 10, 100 NTU

Equipment Problem(s)/Remedies: None

Samples Collected* Listed above

Sample Collection Method(s): GeoPump, ¼ inch Polyethylene tubing

Quality Control: Duplicate Samples, MS, MSD

Proposed Schedule for Tomorrow: Continue sampling SD-08 monitoring wells.

Additional Remarks:

Signature:

John Hymer Job Title: Site Manager

*Indicates sample media: groundwater, surface water, soil or sediment; sample type: composite, grab, split, duplicate, rinsate, and sample I.D. numbers

Project Number/Name: 10-0004 GW Monitoring and Sampling at Multiple Sites

DQCR No.: 000

Date: 7/31/2013 Time On-Site: 6:30 AM Time Off-Site: 16:30 PM

Site Name: SD-08 Weather: Clear/Sunny Temperature: 70 – 98

Contractor Personnel On-Site: NV; Brian Parrish

Visitors On-Site: None

Summary of Work Performed: 0630-0730 Safety meeting, gathered supplies/materials, and mobilized to SD-08 MW-13. 0730-0835 re-sampled SD08-MW13. 0835-0900 returned to Building 1266 to pickup bailer. 0900-1000 re-sampled SD08-MW11. 1000-1100 re-sampled SD08-MW10. 1100-1145 re-sampled S10-MW02. 1145-1430 returned to Building 1266. Conducted packing and shipping of samples. 1400-1630 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 Turbitimeter

Calibration(s) Performed: YSI- PH, Conductivity, ORP

Equipment Problem(s)/Remedies: None

Samples Collected* Listed above

Sample Collection Method(s): GeoPump, ¼ inch Polyethylene tubing

Quality Control: Duplicate Sample, MS, MSD

Proposed Schedule for Tomorrow: Effort is complete.

Additional Remarks:

Signature:

John Hymer Job Title: Site Manager

*Indicates sample media: groundwater, surface water, soil or sediment; sample type: composite, grab, split, duplicate, rinsate, and sample I.D. numbers